

NOT TO BE TAKEN FROM THIS ROOM

IN INTERPERSONAL THEORY:
A STUDY OF THE RELATIONSHIP BETWEEN DOMINANCE-
SUBMISSIVENESS ATTITUDES REFERRING TO
SELF AND TO SIGNIFICANT OTHERS

by

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FACULTY OF EDUCATION
UNIVERSITY OF ALBERTA

August 1957

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THE SELF IN INTERPERSONAL THEORY:

A STUDY OF THE RELATIONSHIP BETWEEN DOMINANCE--
SUBMISSIVENESS ATTITUDES REFERRING TO
SELF AND TO SIGNIFICANT OTHERS

A DISSERTATION SUBMITTED TO THE COMMITTEE ON GRADUATE
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BY

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AUGUST, 1957

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The undersigned hereby certify that they have read and do recommend to the Committee on Graduate Studies for acceptance, a thesis entitled "The Self in Interpersonal Theory: A Study of the Relationship between Dominance-Submissiveness Attitudes Referring to Self and to Significant Others," submitted by Alan Fergus Brown, B.A., B.Ped., in partial fulfilment of the requirements for the degree of Master of Education.

Professor.

Professor.

Professor.

Date August 12th, 1957

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CHAPTER I

The first thing I noticed when I stepped out of the car was the cold. It was a sharp contrast to the warm blanket I had been sitting under. I looked around, trying to get my bearings. The street was empty, the only sound being the distant hum of traffic. I felt a little lost, but I knew I had to find my way to the office. I took a deep breath and started walking.

I walked for about ten minutes, following the main road. The buildings were old and the streets were narrow. I saw a few people walking, but no one seemed to be in a hurry. I was starting to get worried when I saw a sign that said "Office Building". I followed the sign and found the entrance.

I walked into the building and found a receptionist. She asked me for my name and I told her. She then asked me what I was doing there. I told her I was a new employee. She then showed me to my desk. I sat down and looked at the papers on my desk. I saw a letter from my boss. I opened it and read it. It was a letter of welcome. I felt a little better. I then looked at the clock. It was 9:00 AM. I had time to get ready for work.

I went to the bathroom and washed my face. I then went to the kitchen and made a cup of coffee. I sat at the table and drank it. I felt a little better. I then looked at the clock. It was 9:30 AM. I had time to get ready for work.

I went to my desk and started working. I felt a little better. I then looked at the clock. It was 10:00 AM. I had time to get ready for work.

SYNOPSIS

Because personality theory has a direct influence on methods of counselling used in our schools, it is not surprising to find educators interested in personality research. Research support for different theories of personality has been established. One general theory of personality barely in its infancy, the theory of interpersonal relations, is enjoying increasing application in counselling and clinical practice where research has demonstrated its utility. Research support for its fundamental postulates remains scant. Providing support for one of the basic premises of interpersonal theory was the problem of this thesis.

The problem was delimited by examining the definitions of personality, of self and of significant others used by interpersonal theory. It was recognized that most essential to the theory was the hypothesis that one's attitudes toward self are correlated with one's attitudes toward others. Testing this hypothesis, and three related hypotheses, was the task attempted by the writer of this thesis.

The task required the construction of an instrument by means of which one's attitudes toward self could be correlated with one's attitudes toward certain other persons who bear a significant relationship to him. The attitudes chosen in this study were those on dominant and submissive behavior.

The Interpersonal Attitude Scale (Form D-S), developed by the

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the writer, was designed as a set of uni-dimensional scales eliciting attitudes in the dominance-submissiveness continuum. It permitted statistical comparisons of grade nine pupils' attitudes toward self and attitudes toward others. With this instrument the respondent selected seven other-figures, including four peers and three adults, ranked them according to their relative degree of significance to himself, and rated them separately on identical scales. He also rated himself on a similar scale.

To test the hypotheses of this study, the Interpersonal Attitude Scale was administered to 101 grade nine boys and girls. Pearson product-moment coefficients of correlation were calculated between the independent variable, the measure of a subject's attitudes referring to himself, and the five dependent variables which were measures of the subject's attitudes toward (1) the most significant peer, (2) the most significant adult, (3) all selected peers, (4) all selected adults and (5) all selected other-figures.

All correlations were positive and significant at the .01 level of confidence. No significant difference was found between self-peer and self-adult correlations. There were no significant differences between correlations obtained from boys' papers and girls' papers. Tests of the reliability of skewness and kurtosis showed that attitudes toward self and toward others, when measured by the Interpersonal Attitude Scale, closely approach a normal distribution.

The study raised some theoretical problems which could not be answered by this investigation. These refer to the possibility of an intervening variable accounting for the correlations, the possibility

of a causal relationship between the variables examined and the direction of such causality, the reasons for the size of the correlations and the non-significant but persistent sex difference. Further research is needed to answer the unsolved problems suggested by this study.

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1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the problem and the objectives of the research.

2. The second part of the report is a detailed description of the methods used in the study. It includes a description of the experimental design, the data collection procedures, and the statistical methods used for data analysis.

3. The third part of the report is a presentation of the results of the study. It includes a description of the data, a discussion of the findings, and a comparison of the results with previous research.

4. The fourth part of the report is a conclusion and a discussion of the implications of the study. It includes a summary of the findings, a discussion of the limitations of the study, and a discussion of the implications of the results for future research.

5. The fifth part of the report is a list of references. It includes a list of the books, articles, and other sources used in the study.

CHAPTER I

ORIGIN AND PURPOSE

A common phenomenon in the field of personality research is the parallel development of personality theory and tools for the measurement of the variables specified by that theory.¹

The Thematic Apperception Test was developed in conjunction with Murray's need theory; the Rorschach began in part as an attempt to specify and define Jung's types; the Ethnocentrism Scale was designed to measure aspects of the authoritarian personality; and the Q-technique has been adapted and adopted by students of self-theory.

The problem in interpersonal theory today is one of developing instruments, not to demonstrate the clinical value of the theory --this has been done--but to investigate the validity of its fundamental postulates. This is the general problem from which this thesis takes its origins.

A brief sketch of interpersonal theory, beginning with definitions of its terms, will provide a setting for the specific problem of this research.

Definition of Terms

Self. The subject. In interpersonal theory it is the known or conscious self. The self-system is a construct derived from "reflected

¹R. LaForge and R. F. Suczek, "The Interpersonal Dimension of Personality: III An Interpersonal Check List," Journal of Personality, XXIV (1955-56), p. 94.

appraisals":² appraisals of self based on successive conceptualizations of significant others in its interpersonal field. It is this relation between the self-system and its repertory of others that is being investigated in this thesis.

Others. The significant others in the interpersonal repertory of the subject. Taken individually or, at most, in clusters, they would include, first, the mother and other family members and, next, close acquaintances among peers, adults or both, with whom the subject interacts or has interacted personally. This definition excludes Mead's concept of the "generalized other".³ Our inner experience has been built up from selectively attended excerpts from our cultural heritage. The "envelope" or containing manifold of personality is the totality of roles which are learned in interpersonal relations and re-synthesized into "original patterns". These original patterns may sometimes be reified as the "generalized other".

Attitude. A feeling, a readiness to act in one way rather than in another. Murphy believes attitudes consist, at least in part, of partial and finer symbolic acts.⁴

²Harry Stack Sullivan, Conceptions of Modern Psychiatry. (Washington: The William Alanson White Foundation, 1947), p. 10.

³George Herbert Mead, Mind, Self and Society. (Chicago: University of Chicago Press, 1934).

⁴Gardner Murphy, Personality. (New York: Harper and Bros., 1947), p. 980.

Interpersonal. In the realm of interpersonal relations which consist of verbal or gestural activities between persons. The interpersonal attitudes selected for this study were those in the dominance-submissiveness continuum.

Dominance (behavior). Behavior that operates to put the individual in the position of directing others or bending others to his will.

Submissiveness (behavior). Behavior that operates to put the individual in the position of yielding to others or bending to the will of others.

Psychological Setting

Every science has its "basic unit". In biology it is the gene; in physics, the atom. Personality study has been less successful in discovering a generally approved basic unit: to trait theory it is the trait (traits define the personality); to self-theory it is the self (attitudes toward others are a function of the self-concept). But in interpersonal theory it would be less than heresy to say that the self is the others.⁵ The significant others appear as the basic unit and the self-system becomes a concept formed as the result of the interaction of a personality with other persons significant to it. Therefore, if a relationship exists between attitudes toward self and attitudes toward others, and if this is a causal relationship, the interpersonal theorist would reverse the direction of causality assumed

⁵Patrick Mullahy, "A Theory of Interpersonal Relations and the Evolution of Personality," Conceptions of Modern Psychiatry by H. S. Sullivan. (Washington: William Alanson White Foundation, 1947), p. 121.

by the self theory or the trait theory.

For research, a convenient definition of personality would read: "Personality is a theoretical interpretation derived from all a person's behavior."⁶ Expanding this construction, but in no way departing from it, Sullivan, in the word personality, accounts for "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life."⁷ Clarifying further, "pattern" refers to the containing manifold of insignificant differences in interpersonal processes. Significant differences may, and do, arise. When they do, the construct is affected and the result is normally referred to as a personality change.

This definition of personality hypothesizes a system of interpersonal processes, the locus of which system is, by previous definition, the self. This relationship between the individual and his environment of significant other-figures emerges as the postulation most essential to interpersonal theory. Accordingly, it constitutes the hypothesis in most immediate need of investigation. For this reason, certain parts of Sullivan's formulation of personality less pertinent to the self-others relationship are not contained here.

The Problem of this Thesis

The exact wording of the present research problem must take into account certain elements arising from the foregoing discussion.

⁶David C. McClelland, Personality. (New York: The Dryden Press, 1953), p. 69.

⁷Sullivan, op. cit., p. vi.

These are:

1. The relationship of the self-system to its significant others.
2. The relation, as the subject himself construes it, not as other persons view the subject.
3. Conceptualization in terms of interpersonal variables, i.e., attitudes on ethnocentrism or on pacifism-militarism are contraindicated.
4. The general theory, since not otherwise qualified, must hold for all age-groups. Our problem will refer to adolescence, an area wherein research in this field is virtually non-existent.⁸

The following question was intended to incorporate the above elements. It constitutes the basic problem for study in this thesis.

Are grade nine pupils' attitudes of dominance-submissiveness, used in describing the self, related to their dominance-submissiveness attitudes used in describing other persons significant to the subject?

The problem may be restated operationally as a basis for experimental design:

Can an instrument be located or constructed which will quantify at once the subject's self-descriptive attitudes in the dominance-submissiveness continuum and the dominance-submissiveness attitudes he uses in describing certain persons among the peers and adults most important to him?

Intended Contributions

One contribution that a study of self in interpersonal theory may make is to the accumulating body of research on interpersonal

⁸Wattenberg, in speaking of research in self theory, reports: "The amount of work that deals with the teen years is slight." W. Wattenberg, The Adolescent Years. (New York: Harcourt, Brace, 1955), p. 326.

The first part of the paper is devoted to a discussion of the
theoretical aspects of the problem. It is shown that the
problem is equivalent to a problem in the theory of
differential equations.

In the second part of the paper, the author gives a
detailed description of the method used in the solution of the
problem.

The third part of the paper is devoted to a discussion of the
results of the calculations. It is shown that the results are in
good agreement with the theoretical predictions.

The fourth part of the paper is devoted to a discussion of the
conclusions of the work. It is shown that the results of the
calculations are in good agreement with the theoretical
predictions.

The fifth part of the paper is devoted to a discussion of the
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relations. Earlier in this paper the task of validating fundamental hypotheses was reported to be essential at the present time.⁹ Assuming that the existence of a self-others relationship is essential to the general theory, any study investigating this relationship, with interpersonal theory as its frame of reference, would comprise a valuable and necessary contribution to this body of research. By inference, any such study contributes to the even larger body of research in self theory by assisting in the clarification of the nature of self.

This thesis is intended also to contribute to a developing pattern of research at the University of Alberta. The investigators in this research are or have been occupied with the problem of the self, its conceptualization, analysis, and objective observation. All study adolescence. McGregor¹⁰ adapted the Q-technique for group administration and studied self-ideal, self-group, self-group ideal and ideal-group-ideal relationships. Taschuk¹¹ used an empirically derived questionnaire to assess level of self-acceptance, analyzed into four components: personal, social, mental and psysical. An interview validation of Taschuk's instrument is presently in preparation by

⁹ See p. 1, supra. For support of this statement, see Chapter II, pp. 8 ff.

¹⁰ John R. McGregor, "A Study of the Self-Concept and Ideal-Concept in Adolescence," Alberta Journal of Educational Research, I (1955), pp. 5-16.

¹¹ William A. Taschuk, "An Analysis of Self-Concepts of Grade Nine Students," Alberta Journal of Educational Research, III (1957), pp. 94-103.

another investigator using methods of content analysis. Also in preparation is an appraisal of self-concepts and their relation to observed behavior. A study of the relationship between the self and persons closest to it, as conceptualized by the subject, comprises one additional approach to construing the phenomenon called self.

CHAPTER II

RELATED STUDIES

This chapter reports the findings of several investigators who have studied the relationship between self and others. In writing of this self-others relationship, the investigators do not always distinguish between the concept of others in general and the concept of particular others significant to the subject. In this thesis the latter concept is employed. Certain of the studies cited in this chapter contain findings which are not reported here. Where an investigator has drawn several conclusions from his research, only those conclusions which are pertinent to the self-others relationship are herein reported. The actual research evidence on interpersonal theory is scant: the theory itself is barely in its infancy.

Jersild, in his exhaustive study and analysis of essays submitted by 1800 school and college students, found that:

Persons in high school and college appraised themselves in terms of social relationships somewhat more often than did the younger people, but at all grade levels many young people saw themselves as they thought they were seen by others or in terms of their attitudes to others.¹

The significance of relationships with others provides a simple but profoundly important aid to self-examination. In its simplest terms it may be read as follows: If one would know what he thinks about himself, let his glance turn to

¹ Arthur T. Jersild, In Search of Self. (New York: Bureau of publications, Teachers College, Columbia University, 1952), p. 45.

others, for the kinds of thoughts and feelings he has with regard to others are likely in one way or another to reflect his attitudes toward himself.²

Self-Acceptance Studies

A number of students of self-theory, Berger, McIntyre, Phillips, Sheerer, Stock, Omwake and Zuckerman, have introduced the concept of others into their research. Primarily interested in self-acceptance, they have thoroughly investigated Rogers' hypothesis that, ". . .an individual's acceptance of himself is positively and significantly correlated with his acceptance of others."³

Phillips devised a questionnaire to study the relationship of attitudes toward self and attitudes toward others. Using four different groups of high school and college students, he found correlations of .51 to .74 between the two variables.⁴ McIntyre used Phillips' instrument on 244 second semester college students and found a correlation of .46 between the subjects' acceptance of self scores and acceptance of others scores.⁵ Berger developed a group instrument for the measurement of self-acceptance and the acceptance of others and used it on a variety of groups, mostly college students. Of his

²ibid., p. 46.

³Carl R. Rogers, Client-Centered Therapy. (Boston: Houghton-Mifflin Co., 1951), p. 520.

⁴E. Lakin Phillips, Attitudes toward Self and Others: A Brief Questionnaire Report," Journal of Consulting Psychology, XV (1951), pp. 79-81.

⁵C. J. McIntyre, "Acceptance by Others and its Relationship to Acceptance of Self and Others," Journal of Abnormal and Social Psychology, XLVII (1952), pp. 624-625.

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obtained correlations of .365 to .695 all but one were significant. Berger concluded that, ". . . evidence for a positive correlation between acceptance of self and acceptance of others was definitely supported and strengthened by the results of this study."⁶

Sheerer, in an analysis of ten electrically recorded counseling cases, concluded that, "There is a definite and substantial correlation between attitudes of acceptance of and respect for self and acceptance of and respect for others."⁷ Stock, using ten randomly selected electrically recorded counselling cases, developed a method of content analysing the statements made by clients during non-directive psychotherapy interviews.. Stock's conclusions and comments are of interest:

. . . a definite relationship exists between the way an individual feels about himself and the way he feels about other persons. An individual who holds negative feelings toward himself tends to hold negative feelings toward other people in general.⁸

Stock's reference to "other people in general" indicates that she, like others in this section, is using the "generalized other" concept. The concept of the generalized other was developed nearly twenty-five years

⁶Emanuel M. Berger, "The Relation between the Expressed Acceptance of the Self and Expressed Acceptance of Others," Journal of Abnormal and Social Psychology, XLVII (1952), p. 782.

⁷Elizabeth T. Sheerer, "An Analysis of the Relationship between Acceptance of and Respect for Self and Acceptance of and Respect for Others in Ten Counseling Cases," Journal of Consulting Psychology, XIII (1949), p. 179.

⁸Dorothy Stock, "An Investigation into the Interrelation between the Self-Concept and Feelings Directed toward Other Persons and Groups," Journal of Consulting Psychology, XIII (1949), p. 180.

ago by a social philosopher, George Herbert Mead.⁹ Mead held that an individual interacted with the general "other-ness" of society. A psychiatrist, Patrick Mullahy, writing a full generation after Mead, declared this concept to be philosophically naive in modern construction of personality systems.¹⁰ The totality of roles learned in interpersonal relations are re-synthesized into patterns or clusters which may, in theoretical formulations, be mistaken as an "otherness". But since personality is the product of interaction primarily with particular persons,¹¹ it is with a subject's concepts of his individual significant others that a psychiatrist, psychotherapist, school counsellor or personality researcher must work.

Omwake used the instruments of Berger, Phillips and Bills to investigate the self-others relationship. She supports the findings of previous researchers on the topic and concludes that, ". . .there is a marked relationship between the way an individual sees himself and the way he sees others."¹²

Zuckerman, using an entirely different instrument developed by Bus, tested ninety patients and normals of ages ranging from

⁹Mead, op. cit.

¹⁰William Alanson White Foundation, The Contributions of Harry Stack Sullivan, ed. by Patrick Mullahy. (New York: Hermitage Press, 1952).

¹¹See personality defined, p. 4, supra.

¹²Katherine I. Omwake, "The Relation between Acceptance of Self and Acceptance of Others, Shown by Three Personality Inventories," Journal of Consulting Psychology, XVIII (1954), p. 246.

seventeen to forty-five years. He found that self-acceptance scores were not so effective an index of adjustment as acceptance-of-others scores.¹³ Zuckerman's finding is slightly different from the foregoing in that he approaches the position held by interpersonal theory, that one's self-concept is a function of one's concepts of others.

Self, Rated by Others

Powell, Webb, and Crandall and Bellugi have investigated the self-others relationship from a different vantage point. Their procedure is to compare a subject's self-rating with ratings of the subject by others well known to him. The chief function of this procedure is to check the accuracy of a person's self-concept using his peers as judges.

Powell asked the question: "How much agreement is there between a client's conception of his own personality and the opinion about him which is held by his friends?"¹⁴ She used a large number of college dormitory girls as subjects and again as peers of these subjects. Dormitory counsellors were used as experts. She found generally low correlations (.10 to .24) between self-ratings and ratings of self by peers and by experts. Webb, in 1952, studied how an individual's rating of himself compares with the ratings of him by his close

¹³M. Zuckerman, M. Baer, and I. Monashkin, "Acceptance of Self, Parents and People in Patients and Normals," Journal of Clinical Psychology, XII (1956), pp. 327-332.

¹⁴Margaret G. Powell, "Comparisons of Self-Rating, Peer-Rating and Expert's Ratings of Personality and Adjustment," Educational and Psychological Measurement, VIII (1948), p. 225.

associates. He concluded that, "Low correlations . . . indicate a considerable disparity between the individual's concept of himself and the group's concept of the individual. . . ." ¹⁵ Crandall and Bellugi used thirty college girls and found a positive but non-significant correlation between the subject's adjustment level as measured by the Rotter ISB and peer perceptions of the subjects. ¹⁶ Their method of determining peer perceptions, however, had low reliabilities which could possibly have had an attenuating affect on the correlations.

These three studies tend to indicate that an individual's self-concept is a private matter, that it may be virtually unknown to his closest associates. By implication, the same individual's knowledge of his associates' respective self-concepts will be equally scant.

Interpersonal Relations in Counselling

Another body of evidence accumulating in the literature attempts to support interpersonal relations as a specific method of conducting counselling and psychotherapy interviews. The studies referred to in this section consider the problem of establishing good

¹⁵Wilse B. Webb, "Self-Evaluation Compared with Group Evaluation," Journal of Consulting Psychology, XVI (1952), p. 307.

¹⁶Vaughn J. Crandall and Ursula Bellugi, "Some Relationships of Interpersonal and Intrapersonal Conceptualizations to Personal-Social Adjustment," Journal of Personality, XXIII (1954-55), pp. 224-232.

interpersonal relationships. Three men, Bergman,¹⁷ Dittman,¹⁸ and Butler¹⁹ have conducted studies and reported results which are similar to and best exemplified by two studies by Fiedler.²⁰

Fiedler reports that the goodness of counselling is a function of the goodness of the counsellor-counsee relationship--nothing more. He used therapists, both nationally known and novices, from three different schools. He found that experts approached the ideal relationship more often than non-experts, regardless of theoretical orientation. In no case did an expert correlate higher with a non-expert of his own school than with experts of other schools. Since the common factor--interpersonal relationship--tended to transcend theoretical orientation as the instrument of therapy, and since on this same factor the experts were separated from the non-experts, Fiedler concluded that good interpersonal relationship, rather than any particular technique, was itself therapeutic.

¹⁷D. V. Bergman, "Counseling Method and Client Responses," Journal of Consulting Psychology, XV (1951), pp. 216-224.

¹⁸A. T. Dittman, "The Interpersonal Process in Psychotherapy: Development of a Research Method," Journal of Abnormal and Social Psychology, XLVII (1952), pp. 236-244.

¹⁹J. M. Butler, "Interaction of Client and Therapist," Journal of Abnormal and Social Psychology, XLVII (1952), pp. 366-378.

²⁰Fred E. Fiedler, "The Concept of an Ideal Therapeutic Relationship," and "A Comparison of Therapeutic Relationships in Psychoanalytic, Nondirective and Adlerian Therapy," Journal of Consulting Psychology, XIV (1950), pp. 239-245 and pp. 436-445.

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Self-Others in Interpersonal Theory

Writers on the interpersonal relations approach to personality theory today are in much the same situation as self theory writers were a decade ago. Research must first establish counselling or clinical methodology, must devise instruments to assist methodology and must provide a research model to illustrate a design for subsequent investigation. These are the tasks confronting interpersonal theory, tasks begun five years ago but by no means yet complete.

From Harry Stack Sullivan's associates at the William Alanson White Institute, Washington, D. C., a group headed by Patrick Mullahy, has come a wealth of theoretical formulation and clinical speculation. For supporting research one must look to the opposite corner of the country, to a group at Berkeley, California, headed by Rolfe LaForge.

LaForge and collaborators developed the Interpersonal Check List to quantify data comprising the interpersonal core of personality at each of five hypothetical levels:

- Level I: Public Communications. Overt behavior of the subject as rated by others close to him.
- Level II: Conscious Description. Statements the subject makes about himself and others, i.e., the subject's reported perceptions of his interpersonal world.
- Level III: Private Symbolizations. Abstracts from his projective fantasy productions of his self and others.
- Level IV: Unexpressed Unconscious. Themes systematically avoided by the subject which are conspicuous by their inflexible absence.
- Level V: Values. How the subject should and would like to be.²¹

²¹LaForge and Suczek, op. cit., p. 96.

The instrument was administered to several thousand subjects, patients and normals, in group and individual testing, and all data was collected. From all indices used, LaForge and Suczek concluded that the ICL is an effective and flexible operational device for clinical practice and personality research. The relationship between one's attitudes toward himself and certain others showed itself as the chief determinant of personality structure.

Using an earlier form of the ICL, LaForge and others attempted to investigate the validity of a general theory of personality, called the interpersonal system of personality. Their findings from a large number of cases showed that, ". . .the variables of the Interpersonal System do enable prediction of extra-systemic measures . . . according to a priori expectations."²² The ICL and the TAT yielded multiple correlations of .54 and .46 with MMPI ratings in their two samples.

Freedman and others constructed a check list from which the ICL later was developed. The list contained "interpersonal traits" (personality attributes in adjective form) and "interpersonal mechanisms" (similar attributes using verbs instead of adjectives).²³ On this instrument the subject rated himself in relation to each of certain other persons. The subjects were also rated by a group of

²²R. LaForge et al., "The Interpersonal Dimension of Personality: II: An Objective Study of Repression," Journal of Personality, XXIII (1954-55), p. 149.

²³M. B. Freedman et al., "The Interpersonal Dimension of Personality," Journal of Personality, XX (1951-52), pp. 143-161.

experts who had observed their behavior. Freedman found a high degree of agreement among raters when their ratings were compared with scores of the subjects.

Diller asked sixty subjects to rate on a personality rating scale twelve close friends of varying degrees of distance from the subject. In addition, each subject unwittingly rated himself by the Wolff disguised-handwriting technique. They were then submitted to an induced success, failure or neutral experience and the original procedures were repeated. Diller found that (1) after success, self-attitudes are positively correlated with attitudes toward friends at varying distances, but that (2) after failure a disrupted pattern of attitudes appears, self-attitudes were not positively correlated with attitudes toward others.²⁴ Diller's findings indicate that the relationship between attitudes toward self and toward others is not constant throughout all interpersonal relations.

Kelly used the Role Construct Repertory Test with several clinical cases to indicate that a subject identifies himself with other-figures within his immediate family to a greater degree than with other-figures outside the family.²⁵ In another study Kelly demonstrated the validity of his instrument by comparing the full analysis of one subject's test results with a twelve page clinical analysis of the subject by an independent psychotherapist. The analyses were

²⁴Leonard Diller, "Conscious and Unconscious Self-Attitudes after Success and Failure," Journal of Personality, XXIII (1954-55), pp. 1-12.

²⁵George A. Kelly, The Psychology of Personal Constructs, Vol. I, A Theory of Personality. (New York: Norton and Co., 1955), p. 292.

²⁶ibid., pp. 242-266.

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strikingly similar.

Bieri used thirteen pairs of subjects, strangers to each other, and placed them in a constructive interaction situation. A control group was used. Each subject responded to the Rozensweig Picture-Frustration Study to rate his partner before and after the interaction situation. In this manner he was able to investigate how an interpersonal relationship develops, and how it changes. His findings support his major hypothesis, that: "In a constructive interaction situation one's perceptions of another will change in the direction of increased similarity to oneself."²⁷

Summary

Eight studies investigating the relationship of self-acceptance to acceptance of others over a ten year period, 1947 to 1956, revealed a self-others relationship for attitudes of acceptance and respect. These studies would appear to be based on the concept of others-in-general rather than on certain other-figures specific to the subject. Another group of studies has furnished evidence to indicate that other persons are poor judges of what an individual thinks of himself, in spite of how closely the other persons know this individual. Fiedler and others, working independently, have demonstrated that counselling and psychotherapy are based on good interpersonal relations. Research on interpersonal theory has generally skirted the problem of supporting

²⁷ James Bieri, Changes in Interpersonal Perceptions Following Social Interaction," Journal of Abnormal and Social Psychology, XLVIII (1953), p. 66.

one of its most basic premises, that one's self-conceptualization is closely associated with one's concepts of others.²⁸ Instead, it has accepted this self-others relationship as a fact and has proceeded to demonstrate the utility of certain instruments.

²⁸Cf. "We are just now in great need of careful study . . . of the process of involvement and identification." Leonard S. Cottrell and Nelson Foote, "Sullivan's Contributions to Social Psychology," Contributions of Harry Stack Sullivan, ed. by Patrick Mullahy for the William Alanson White Foundation. (New York: The Hermitage Press, 1952), p. 193.

CHAPTER III

RESEARCH PLAN

This thesis is an attempt to solve the problem of whether grade nine pupils' attitudes of dominance-submissiveness used in describing the self are related to the dominance-submissiveness attitudes they use in describing other persons closely known to them. This problem requires locating or constructing an instrument to measure a subject's dominance-submissiveness attitudes toward both himself and certain other persons so that the two may be compared. This requirement indicates a correlational study.

To investigate the basic problem, four hypotheses were constructed and were tested with an instrument designed to meet their requirements. Of several instruments which could be used, the three holding the most promise of fulfilling the conditions of the hypotheses were a concept formation test, an interpersonal check list and a set of attitude scales.

Four Hypotheses

Hypothesis One. Grade nine pupils' attitudes of dominance-submissiveness used in describing the self are correlated with their dominance-submissiveness attitudes describing others.

This hypothesis, arising from the research problem, is the hypothesis basic to this study. Hypotheses two, three and four are

closely associated with it.

Hypothesis Two. The correlation between attitudes toward self and attitudes toward peers is not significantly different from the correlation between attitudes toward self and attitudes toward adults.

Hypothesis Three. Grade nine boys and grade nine girls do not differ in the degree to which their self-attitudes are correlated with their attitudes toward others.

Hypothesis Four. Attitudes of dominance-submissiveness toward self and toward others are normally distributed among grade nine pupils.

Conditions Placed on the Instrument
by Hypothesis One

Because of the nature of the basic hypothesis and the definitions supplied earlier, the instrument to be developed must meet certain conditions peculiar to this thesis. The seven conditions that follow were expected to guide the investigation in the preparation of the instrument and to serve as criteria of the instrument once it was developed.

Condition One. The instrument used for quantifying attitudes toward self must be the same as the one used in quantifying attitudes toward others. This is necessary if the relationship between the two is to be investigated.

Condition Two. The instrument must permit statistical comparisons: it must be so constructed that it will allow for some type of correlation,

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Chi-square tests or other form of comparative statistics to provide an index of interrelationship.

Condition Three. All items of the instrument must fall within the dominance-submissiveness continuum. Although hypothesis one sets forth a comparative study rather than a status study, in which instance the purity of the instrument defines the study, failure to meet this condition would contaminate the variables being measured.

Condition Four. The definition of self rejects any instrument which attempts to quantify attitudes through symbolic behavior tests such as the Rorschach or the TAT.

Condition Five. The instrument must not be too difficult for a sample of grade nine students. Results must be as free as possible from contaminating factors of intelligence and reading ability: verbal fluency, capacity in concept-formation and ability to draw inferences or follow directions. The restrictions imposed by this condition become particularly evident if we assume that a sample of grade nine pupils would probably range in age from thirteen to seventeen years. The range in mental age may be still wider.

Condition Six. The 'significant others' imposes three conditions on the instrument: (a) it must include an adequate representation of the others as defined, (b) it must contain some estimate of the relative significance of each other-figure to the subject, and (c) the other-figures must be measured separately.

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evidence of the same kind.

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possible to find any other evidence of the same kind.

Condition Seven. The instrument must finally meet two conditions which are dictated by practical and necessary considerations rather than by hypothesis one. These are (a) that the instrument be short enough to be administered in the one classroom period which was available and (b) that it contain no feature which might provoke adverse reactions from the subjects, their parents or their teachers.

Choosing among Three Instruments

The Conceptual Grid. The type of instrument first attempted in this study was a conceptual grid based on the Role Construct Repertory Test.¹ This test was designed in the form of a squared grid. Across the top of the grid the respondent identified persons closest to him according to certain role definitions. To form concept dimensions he compared these persons in several combinations of three at a time. After each comparison the respondent compared himself with each of the other-figures at the top of the grid on the basis of the concept dimension just formed. Analysis of the responses would provide the examiner with data regarding (1) the extent to which the respondent identified himself with each of several persons defined by role and (2) the traits or concepts he characteristically employs while describing himself and others.

When the writer's adaptation of this instrument was completed, it was administered to two grade nine boys individually.

This form of test has been demonstrated elsewhere as having

¹Kelly, op. cit., chap 6.

definite clinical value.² But the trial administration indicated that the use of the test as part of this study would violate conditions two, three and five, above. Statistical comparisons were either too simple to yield significant results or so involved that the purpose of the study would become confused. The concepts fell not into one dimension, such as dominance-submissiveness, but were by definition multi-dimensional. It was possible for any one respondent to use entirely different concept dimensions from the next. Finally, the concept-formation ability of grade nine pupils as a group is not yet sufficiently developed to handle the test.

It would be possible to make a further modification to the conceptual grid to reduce the difficulties mentioned in the foregoing paragraph. The concepts could be entered down one side of the grid and constructed to fall within one continuum. By using the Thurstone scaling method, the investigator might select the statements on a normal distribution to permit the use of comparative statistics. The subject would, presumably, check the number of persons described by each statement. Such a modification was designed but never completed nor administered.

The principal reason for discontinuing this technique was that if a subject's population of statements describing others were to be correlated with a population of statements describing the self, another test would be required to provide the latter. Besides complicating test administration this would violate condition one.

²ibid.

The Interpersonal Check List. Another clinical instrument is the Interpersonal Check List³ developed over a four year period by a group at Berkeley. Notwithstanding the claims of its authors, this test has limited use in personality research. The ICL is printed in the form of a circle. Eight diameters represent eight continua of interpersonal traits with moderate items near the centre and extreme ones at the circumference. The means by which statistical inferences may be drawn from its results are equally circuitous.

The check list contains 144 items classified into eight interpersonal continua one of which is dominance-submissiveness. The items were collected from a study of the references to interpersonal traits in all the literature on personality theory written prior to 1950. Items were validated by quantifying the reactions of a large number of clinical subjects to each. Final selection was made by a team representing psychologists, psychotherapists and psychiatrists. The ICL was useful to the present thesis in that the dominance-submissiveness items formed a part of the pool of items from which the Interpersonal Attitude Scale was later constructed.

The Attitude Scale. The attitude scale was ultimately selected because this form of test showed greatest possibilities of meeting the conditions set forth earlier and also because attitude scales have traditionally been used in quantifying different sets of culturally

³R. LaForge and R. F. Suczek, "The Interpersonal Dimension of Personality: III An Interpersonal Check List," Journal of Personality, XXIV (1955-56), pp. 94-112.

acquired attitudes. A search was made for a published attitude scale which would meet the requirements of this study. None could be located. The alternative of constructing an attitude scale, with which to test the four hypotheses stated earlier, was accepted.

An attitude scale is a form of self-report instrument. Consequently it falls heir to the criticisms due all tests of the self-report type. Hall and Lindzey exemplify this criticism as follows:

There is abundant evidence to show that factors unavailable to consciousness motivate behavior, and that what a person says to himself is highly colored and distorted by defences of various kinds. Self-reports are notoriously lacking in reliability not only because the person may intend to deceive the listener but also because he does not know the whole truth about himself.⁴

To the point that the subject may intend deception there is little defence, excepting that in this instance every effort was made to select examiners known to be in good rapport with the subjects. That the subject has not the whole truth about himself is irrelevant here since what is being measured is what he thinks he knows about himself and about others. That a subject's self-concept is coloured and distorted is not contested; rather, it is assumed. Hypothesis one dictates that what a person thinks about himself, accurately or distorted, will correlate with what he thinks about others. The latter may also be a distorted description. In short, Hall and Lindzey's criticisms, and those of self-reports generally, may be valid and necessary but are

⁴Calvin S. Hall and Gardner Lindzey, Theories of Personality. (New York: John Wiley and Sons, 1957), p. 498.

irrelevant to the present thesis.

Within the field of attitude scaling there are at least three forms from which to choose: the Thurstone type with equal-appearing intervals, the Likert type with forced multiple-choice responses and the Guttman type containing scale analysis. The Guttman scales have failed to impress the critics; three comments from the literature will suffice:

. . .the writers feel that several basic flaws in the method are apparent and that an attitude of suspicion toward the general application of the technique is justified.⁵

Scale analysis . . . becomes a technique secondary to the problem of item selection.⁶

Guttman's approach is a less satisfactory approach to the problems of scale refinements than the traditional methods.⁷

McNemar, in a definitive study on "Opinion-Attitude Methodology", refers to the Thurstone and Likert type scales when he writes, "Both methods have merits, and both have defects which might be overcome by a combination of the two."⁸ McNemar suggests that either technique will yield a more reliable scale when it embodies a feature of the other method: a Thurstone scale purified by internal consistency tests

⁵K. E. Clark and P. H. Kriedt, "An Application of Guttman's New Scaling Techniques to an Attitude Questionnaire," Educational and Psychological Measurement, VIII (1948), p. 221.

⁶A. L. Edwards and F. P. Kilpatrick, "A Technique for the Construction of Attitude Scales," Journal of Applied Psychology, XXXII (1948), p. 375.

⁷P. H. Kriedt and K. E. Clark, "Item Analysis vs. Scale Analysis," Journal of Applied Psychology, XXXIII (1949), p. 119.

⁸Quinn McNemar, "Opinion-Attitude Methodology," Psychological Bulletin, XLIII (1946), p. 308.

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and using a forced choice response, or a Likert scale using items selected according to the ratings of competent judges.⁹ The instrument developed for this study is of the latter form. Regarding the Thurstone and Likert scales, Cronbach states: "Since corresponding scales of the two types have high correlations, there is little difference except in convenience. . . . For most purposes, it matters little which method is used."¹⁰ Considering the number of persons available to serve as judges and the amount of labour required of the judges for the Thurstone as compared with the Likert technique, the latter was thought to be the more convenient.

⁹loc. cit.

¹⁰Lee J. Cronbach, Essentials of Psychological Testing. (New York: Harper and Bros., 1949), p. 373.

CHAPTER IV

PREPARATION OF THE INSTRUMENT:

THE INTERPERSONAL ATTITUDE SCALE (FORM D-S)¹

This chapter describes the steps required in the construction of an attitude scale: collecting, sorting, editing items, tests of logical validation, internal consistency, reliability and validity, together with certain steps required by the peculiarities of this study. The 'conditions' cited in the previous chapter are used as criteria at the end of this chapter.

Collecting Items

As many published tests claiming to contain dominance-submissiveness items as could be located were examined. A pool of 130 items was collected from these sources. Each item in this pool was accepted as being in the dominance-submissiveness continuum if the authors claimed it so. Sources included the Interpersonal Check List, Pintner's Aspects of Personality, Guilford-Martin Factors GAMIN, and the Bernreuter Personality Inventory.

The wording of every item collected had to be changed. The ICL

¹"Form D-S" is included in the title of this scale to denote the fact that not all interpersonal attitudes, but only those in the dominance-submissiveness continuum, are included. A title such as "Dominance-Submissiveness Attitude Scale" would be too restrictive: both the attitudes and the complete instrument are interpersonal in scope.

(1) *General* - *General*

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items, descriptive words, phrases or fragments, were changed into descriptive statement form. Items of the other tests were less readily changed. Hypothesis one indicates the use of descriptive attitudes; a corollary of condition one would dictate that an item used to describe the self must also be used to describe an other-figure. The Aspects, the GAMIN and the PI items describe the self, often by asking the subject his most probable reaction to a specific interpersonal situation. Accordingly, they frequently lose their meaning when applied to others. Rewording these items into descriptive statement form, applicable to both self and others, reduced their number.

Editing the Items

A set of criteria for editing items to be included in any attitude scale has been advanced by Edwards and Kilpatrick. They recommend elimination of all those items which:

1. Are likely to be endorsed by individuals of opposed attitudes.
2. Are factual or can be interpreted as such.
3. Are obviously irrelevant to the issue under consideration.
4. Appear likely to be endorsed by everyone or by no one.
5. Seem to be subject to varying interpretations for any reason.
6. Contain a word or words not common to the vocabularies of the subjects.²

With the above criteria as a guide, the items were edited by

²Edwards and Kilpatrick, op. cit., p. 379.

1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part of the report is devoted to a detailed analysis of the economic situation.

3. The third part of the report is devoted to a detailed analysis of the social situation.

4. The fourth part of the report is devoted to a detailed analysis of the cultural situation.

5. The fifth part of the report is devoted to a detailed analysis of the political situation.

6. The sixth part of the report is devoted to a detailed analysis of the international situation.

7. The seventh part of the report is devoted to a detailed analysis of the future prospects.

8. The eighth part of the report is devoted to a detailed analysis of the conclusions.

9. The ninth part of the report is devoted to a detailed analysis of the recommendations.

10. The tenth part of the report is devoted to a detailed analysis of the annexes.

ANNEXES

1. The first annex is devoted to a detailed analysis of the economic situation.

2. The second annex is devoted to a detailed analysis of the social situation.

3. The third annex is devoted to a detailed analysis of the cultural situation.

4. The fourth annex is devoted to a detailed analysis of the political situation.

5. The fifth annex is devoted to a detailed analysis of the international situation.

6. The sixth annex is devoted to a detailed analysis of the future prospects.

7. The seventh annex is devoted to a detailed analysis of the conclusions.

8. The eighth annex is devoted to a detailed analysis of the recommendations.

9. The ninth annex is devoted to a detailed analysis of the annexes.

10. The tenth annex is devoted to a detailed analysis of the annexes.

the writer, by a group of editors, and later by a group of judges. Items showing restricted application, duplicate items and ambiguous items were first sorted out by the writer. Next, a group of six persons, selected because of their contact with and understanding of junior high school children, their familiarity with test construction and psychological testing, and their knowledge and standards of English usage, were asked to edit the remaining seventy-two items.³ Included in the instructions to each editor was the following paragraph:

Please edit these statements in this manner. Ask yourself: "Would a boy or girl of about fifteen years of age readily understand this statement?", "Is this statement identical in meaning, or nearly so, with another statement in the list?", "Is the grammar or vocabulary unsuitable to boys and girls of this age?", "In the meaning unclear or ambiguous?" and so forth. Please make any changes in wording you consider desirable, and do not hesitate to label a statement "unsatisfactory" if no changes can be made to improve upon it. If you consider a statement good as it stands, simply leave blank the space below it.

Following the recommendations of the editors, eight of the seventy-two items were discarded or were included in other statements through altered wording, and changes were made in many other statements.

Logical Validation

The next step was to determine which of the remaining sixty-four items were most valid, considering that their purpose was to elicit an attitude of dominance or submissiveness from the respondent. This step may be thought of as completing the task set forth by Edwards and

³See "Form Used for Editing Items," Appendix A, pp. 69-72.

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Kilpatrick. At this step, all items must be discarded which fall under criteria (1), (2) or (4): may be endorsed by individuals of opposed attitudes, are irrelevant to the issue, or may be endorsed by everyone or no one.

The sixty-four items together with a page of instructions and a page for general comments were mimeographed⁴ and sent to each of twenty-seven judges who had agreed to serve in this capacity. They were asked to rate each item as satisfactory, very satisfactory or unsatisfactory according to how well each item could be expected to elicit an attitude of dominance (items one to thirty-two) or submissiveness (items thirty-three to sixty-four). Their ratings were assigned values of two for very satisfactory, one for satisfactory and zero for unsatisfactory.

Definitions of dominance and submissiveness were deliberately omitted from the page of instructions. Anything beyond a dictionary definition -- with which one could assume the judges would be familiar -- would render their task pointless. It was expected that the judges who, in their training and experience had been able to build a concept of dominant behavior and its opposite, would rate the items accordingly. It follows, of course, that their ratings would be only as valid as their respective concepts of dominance and submissiveness.

Twenty judges responded. From their summed ratings, twenty-four items were discarded because of low validity. Eight more items were discarded, two because they overlapped other items and six because

⁴See "Logical Validation Instrument," Appendix B, pp.73-77.

certain judges observed that these items required the subject to draw inferences from behavior rather than to make descriptions of observed behavior.

The scale now contained thirty-two items, sixteen positive and sixteen negative. Every statement began with the words "This person" so that the subject could describe other-figures. But the statements were so worded that their meaning would not be changed when prefixed with "I" in place of "This person". Up to this point, item selection has been guided by adults who had used their individual judgments in processing the items. The next phase placed the scale in the hands of the population for which it was designed, grade nine pupils of both sexes, with subsequent processing being done by a test of internal consistency.

Internal Consistency (32-Item Scale)

The dominance and submissiveness items were arranged in random sequence. The resulting thirty-two item scale was mimeographed⁵ and administered to seventy-four grade nine pupils, the entire grade nine class at an urban junior high school. The group included both sexes, had a mean I.Q. of 105 based on the Laycock Mental Ability Test results of four years earlier. The school is located in a lower middle class residential area of the city.

In keeping with the established Likert method of attitude scaling, each statement was followed by five response categories, one of which the subject must select. In the present instance the respondent was

⁵See "Internal Consistency Test Instrument," Appendix C, pp.78-80.

asked to circle SA, A, U, D or SD to indicate that he strongly agreed, agreed, was undecided, disagreed or strongly disagreed with the statement in describing himself or whatever other-figure he was rating on this scale. Instructions outlining this procedure were read to the pupils by their examiner who in this instance was the present writer. Definitions of response categories, e.g., "SA means I strongly agree with this statement in describing myself," were written on the blackboard. The papers were not anonymously answered in that spaces were provided for the pupil's initials and sex. These, and the test data, were required only for the test-retest reliability coefficient computed later. The pupils were assured, however, that their results would not be recorded and would be held in the writer's confidence.

For the purpose of determining the internal consistency of the test it was decided that a self-rating only, rather than a rating of self and several others, would suffice. If all items fall, or fail to fall, into one continuum when the self is being measured, it is reasonable to assume the same results would obtain when the respondent is rating others. (The validity of this assumption has not been checked.) Hence, each of the thirty-two items in this test of internal consistency began with "I".

Twenty-three pupils were tested April 3rd, 1957. The remaining fifty-one were tested two days later. The items were scored by assigning values to the response categories (SA, A, U, D, SD) of five, four, three, two and one on dominance items and values of the reverse order on submissiveness items. The full scale score was the sum of the thirty-two item scores. The possible range of scores on the full scale

The first part of the report deals with the general situation of the country, and the second part with the specific situation of the various regions. The first part is divided into two sections: the first section deals with the general situation of the country, and the second section deals with the specific situation of the various regions. The second part is divided into three sections: the first section deals with the specific situation of the various regions, the second section deals with the specific situation of the various regions, and the third section deals with the specific situation of the various regions.

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would run from 32 to 160 (32 x 1 to 32 x 5). Pearson product-moment coefficients of correlation were calculated between each of the item scores and the full scale scores.

The Likert technique of attitude scaling requires that the final selection of items be based on internal consistency. For reasons discussed in the next section it was decided to limit the final test to twenty items. The correlations of the thirty-two items used in the internal consistency test ranged in size from - .01 to .51. Nine dominance and ten submissiveness items yielded correlations significant at the .01 level of confidence. On four more dominance items and two more submissiveness items, correlations significant at the .05 level were obtained. When the items were ranked from highest to lowest according to the size of the correlation obtained, size of correlation diminished sharply after the ninth-ranking dominance item and after the tenth-ranking submissiveness item. These data are presented in Table 1.

Length of the Test

There are three acceptable means of determining the best length of an attitude scale in terms of the number of items it contains. First, a scale must be long enough to ensure an adequate coverage of the continuum being measured. One has reached this point when additional increments of items fails to yield any change in results. Because this method is seldom practical in terms of time and available population it is generally discarded in favor of a subjective judgment of this criterion plus one or two of the remaining considerations.

TABLE 1

ITEM-FULL SCALE CORRELATIONS IN A 32-ITEM ATTITUDE SCALE
ON DOMINANCE AND SUBMISSIVENESS ADMINISTERED
TO 74 GRADE NINE PUPILS

DOMINANCE ITEMS			SUBMISSIVENESS ITEMS	
Item No.	r_{is}^*	Rank (of 16)	Item No.	r_{is}^*
5	.51	1	18	.51
24	.50	2	22	.49
1	.49	3	27	.46
13	.47	4	6	.46
23	.46	5	8	.44
21	.45	6	16	.42
3	.36	7	9	.39
19	.35	8	2	.37
28	.34	9	15	.35
17	.28 a	10	11	.34
20	.276 ^a	11	10	.24 ^a
31	.27 a	12	30	.23 ^a
12	.25 a	13	26	.17 ^b
4	.19 b	14	14	.15 ^b
7	.09 b	15	29	.14 ^b
32	.002 ^b	16	25	-.01 ^b

* The subscript i = item score, s = full scale score.

^a Fails to obtain significance at the .01 level.

^b Fails to obtain significance at the .05 level.

A second means for determining test length is to compare it with other scales of its type. Literature on attitude scaling makes frequent reference to scales of eighteen, twenty and twenty-two items.⁶ They have been shorter but seldom much longer.

⁶ Cf. McNemar, *op. cit.*, or Bert F. Green, "Attitude Measurement," *Handbook of Social Psychology*, ed. by Gardner Lindzey. (Cambridge: Addison-Wesley Publishing Co., 1954), Vol. I, pp. 335-369.

Finally a scale must contain no more items than can be completed during the time available for testing. The available time in this instance was one classroom period or thirty-five minutes. The attention span of the respondent might also be considered when test length is being set. Since attention span is a determinant of the length of classroom periods, this factor serves to support a testing time of thirty-five minutes.

A small sub-study was undertaken for the principal purpose of learning how many items a grade nine pupil could be expected to complete in a thirty-five minute classroom period. Six grade nine pupils, three boys and three girls, volunteered as subjects for this study. None of the subjects had previously seen this scale in any form. Twenty-two items were picked at random from the thirty-two that survived the logical validation phase.

Each volunteer was asked to rate ten peers, five adults and himself on the scale. The ten peers and one of the adults were selected by the subjects; the remaining four adults were specified by role. A set of instructions, a page of statements and sixteen answer strips--narrow sheets containing only the response categories to match the statements--were furnished each volunteer.⁷ The test was administered to the group and the amount of time taken by each volunteer was recorded. A period of five minutes was allowed for reading directions and asking questions; this amount was subtracted from the total time before the

⁷ See "Sub-Study Instrument," Appendix D, pp.81-84

time was recorded. Since a maximum of forty-five minutes was available, most subjects did not complete the entire test. For this reason, the number of answer pages completed by each subject was also recorded. The recorded results appear in Table 2.

TABLE 2
TIME REQUIRED BY SIX GRADE NINE SUBJECTS TO
COMPLETE A 22-ITEM 16-PAGE DOMINANCE
SUBMISSIVENESS ATTITUDE SCALE

Subject	Pages Completed	Test Time	Average Time per p.	Would take to complete:	
				All pages	8 pages
Joan	16 (all)	35 min.	2.19 min.	35 min.	18 min.
Emrys	14	35 min.	2.50 min.	40 min.	20 min.
Bob	12	30 min.	2.50 min.	40 min.	20 min.
Ulrich	13	35 min.	2.69 min.	43 min.	22 min.
Edith	14	40 min.	2.86 min.	46 min.	23 min.
Sylvia	9	40 min.	4.44 min.	71 min.	36 min.

An inspection of the findings reveals that most subjects required between two and three minutes to complete each answer page of twenty-two items. It was decided that twenty-five minutes of a classroom period should be allowed for the actual completion of answer pages. A longer time would reduce the time reserved for instructions which were to be more complex in the final test than in this sub-study. Besides the time required for reading or giving instructions, time may be needed to allow an incoming class to settle. And, of course, one cannot predict from so small a sample how many pupils like "Sylvia"

there may be in a class.

With twenty-five minutes of test time there were two clear alternatives: cut the number of items by one-half, or reduce the number of test pages, each of which represents a person to be rated, to one-half. A Likert type scale with markedly fewer than twenty items hardly covers the attitude being measured. Thus the number of items was fixed at twenty and, assuming that four peers and three adults comprises an adequate representation of a person's significant other-figures, the number of test pages was set at eight.

Following the sub-study testing, the writer held a discussion with the volunteers to learn what difficulties they had encountered in completing the test. Largely as a result of this discussion the following decisions were made: (1) The answer strip was discarded in favor of complete test pages, each page to contain the statements and the response categories with the statements of the last page beginning with "I". (2) Age in years and months was discarded in favor of date of birth. (3) If the self-rating page was to appear at the end of the test, its most logical position, the examiner must stop the subjects five minutes before full time and ask those not finished to complete that page. Otherwise this essential page might remain untouched by the slower respondents. (4) The number of peers was reduced not only on the basis of time but also because of the great difficulty most volunteers had in citing ten close peers. The number of adults was reduced for the same reasons. (5) Adults were made self-selected rather than role-defined. This was due to the difficulty of some subjects in finding adults to fit the roles (mother, father, liked

about the same time.

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teacher, disliked teacher) and to the objection to the role definitions by some others.

Internal Consistency (Final 20 Items)

The test had been limited to twenty items. It was next necessary to learn whether the twenty-item scale would meet the Likert requirement of internal consistency. For this purpose the scores of the twenty retained items were correlated with the twenty-item full scale scores. The retained items were those which had yielded the largest correlations in the thirty-two item test of internal consistency. They may be identified in Table 1, above, as those above the solid line. When the twenty-item test of internal consistency was complete, most of the retained items had higher correlations. Correlations ranged in size from .30 to .54. That all were significant at the .01 level of confidence demonstrates the fulfilment of the internal consistency requirement. These data are presented in Table 3.

The slight rise in most correlations may indicate a higher degree of internal consistency in the reduced scale. Items contained in Table 3 are those which comprise the Interpersonal Attitude Scale (Form D-S).

Reliability

To compute a coefficient of reliability the thirty-two items of the test papers from the April 3rd and 5th testing were again used. This time only those twenty items finally accepted were summed, yielding a full-scale score on the final twenty-item scale. The

possible range of scores this time would be from 20 to 100 (20 x 1 to 20 x 5).

TABLE 3

ITEM-FULL SCALE CORRELATIONS IN A 20-ITEM ATTITUDE SCALE
ON DOMINANCE AND SUBMISSIVENESS ADMINISTERED
TO 74 GRADE NINE PUPILS

DOMINANCE ITEMS			SUBMISSIVENESS ITEMS	
Item No.	r_{is}	Rank (of 10)	Item No.	r_{is}
24	.51 (.50)*	1	22	.54 (.49)
1	.50 (.49)	2	6	.52 (.46)
23	.50 (.46)	3	18	.49 (.51)
5	.47 (.51)	4	8	.48 (.44)
13	.47 (.47)	5	9	.45 (.39)
19	.45 (.35)	6	15	.36 (.35)
21	.41 (.45)	7	16	.35 (.42)
28	.37 (.34)	8	2	.35 (.37)
3	.36 (.36)	9	27	.34 (.46)
17	.30 (.28)	10	11	.34 (.34)

*Figures in parentheses are copied from Table 1.

Exactly one week later, April 10th and 12th, the thirty-two item scale was re-administered in exactly the same manner as previously. The pupils had not been forewarned of the re-testing. The pupils responded to the full scale as previously but the retest papers were scored only on the twenty items finally selected. Circumstances made it impossible to retest one of the three classrooms. This, and some absentees, reduced the test-retest population to forty-three pupils. When a twenty-item attitude scale was administered twice, with a one week interval, to forty-three grade nine pupils, the obtained

coefficient of reliability was $.91 \pm .03$. This finding indicates that the instrument has a high degree of stability.⁸

A reliability coefficient has been computed for the self-rating scale only. Since the scale used for eliciting attitudes toward others is identical with the self-scale, excepting the statement prefix of "This person", the inference is drawn that the complete Interpersonal Attitude Scale would possess a high degree of test-retest reliability.

Validity

There is no satisfactory method of empirically validating the complete scale or any of its components. It is true that a skilled observer could attempt a validation of the self-page by reporting whenever in fact a subject does "give orders", "belittle himself" or "talk back". The results so obtained would certainly indicate the degree to which the subject's self-concept correlated with his actual behavior--an interesting study but one in no way pertinent to the present thesis. Here we are relating the subject's concept of himself (be it ever so inaccurate) with his concept of others (also of questionable accuracy). The relationship so obtained may allow us to understand the manner in which our subject construes his interpersonal environment. The same argument accounts for the impossibility of validating the attitude scales describing other persons.

⁸Of the three types of reliability coefficients--coefficient of equivalence, coefficient of stability, coefficient of stability and equivalence--the one that measures fluctuations on the same questions from one time to another is the coefficient of stability. Cf. Cronbach, op. cit., p. 65.

If the examiner could reach the subject's innermost thought processes he could perhaps decide whether or not the subject's test paper was a valid representation of these thoughts. This method was tried by a group at Berkeley using the TAT to check their Interpersonal Check List. Their results suggest that indirect projective fantasy productions did not tap the thought processes required to validate their instrument.⁹

The personal interview is sometimes used as a criterion of validity when the interviewee's responses are content-analyzed. The assumed advantage is that the skilled interviewer is able to reach the interviewee's otherwise unrevealed thoughts. Berelson, in an exhaustive study of content-analyzed interviewing, reports that, "Much more progress has been made in the conduct of the interview than in its statistical analysis."¹⁰ Before using any technique as a criterion of validity one generally learns the reliability of the technique. A validity coefficient is affected by the size of the criterion's reliability coefficient. Berelson noted that only one in every five or six content-analyzed interview studies have reported their reliability coefficients. He concludes: "The published record is less than satisfactory. . . . Nor does the situation appear to be improving."¹¹

⁹R. LaForge et al., "The Interpersonal Dimension of Personality: II An Objective Study of Repression," Journal of Personality, XXIII (1954-55), pp. 129-153.

¹⁰Bernard Berelson, "Content Analysis," Handbook of Social Psychology, ed. by Gardner Lindzey. (Cambridge: Addison-Wesley Publishing Co., 1954), Vol. I, p. 495.

¹¹ibid., p. 514.

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Hence the interview method of validation was rejected by the present writer.

A test has empirical validity when its items measure what they purport to measure. When such an index is not obtainable, one turns to the experts and asks, "After examining these items in the light of your training and experience, would you judge that they would probably measure the trait under consideration?" This alternative, called intrinsic or logical validation, was accepted in the present instance. It has been described earlier.

In practice, the validity of most tests used in educational measurement, including attitude scales, is a function of the rapport between tester and tested. It can be safely assumed that the examiners in this study had good rapport with the pupils they tested. The examiner of eighty pupils in the final test was their guidance counsellor and classroom teacher of health and personal development. The examiner of twenty-one pupils in the final test was their classroom teacher. The examiner of the pupils used in the internal consistency test and later in the reliability retest was their guidance counsellor. Testing was carried out in April and May, by which time the examiners and pupils knew each other well.

Significance of 'Others'

In a respondent's repertory of significant others, some persons will be very close to him, some will be more distant. To determine the relative degree of significance to the respondent of each other-figure selected, the subject is asked to place in rank-

order the persons selected according to degree of significance. In the test instructions this is worded: "An age-mate who plays or has played the most (second most, third most or fourth most) important part in your life." Adults and peers are ranked separately.

Public Relations

Asking a school child to state whether or not his mother is domineering, his father seldom talks back, or his teacher is a weak or spineless person could provoke embarrassing reactions. Mother, father and teacher are definitely significant others in a grade nine pupil's interpersonal world and their inclusion in specified roles would enhance this piece of research. However, for the necessary and practical consideration of public relations the following steps were taken: (1) Adult figures would be self-selected by the respondent. (2) All figures would be identified by the respondent on his paper by name, nickname, initials or any other symbol later recognizable to the respondent during the test. (3) All test papers would be anonymously answered, the only information required of the respondent being his sex and date of birth. (4) The examiner would be a person of good rapport with the pupils who would assure them of the anonymity of their papers. (5) The tests would not be administered in a residential area in which there had been previous public relations difficulties. (6) Permission to use the tests in city schools would be obtained from the administrative offices of the school system.

The Conditions as Criteria

The instrument in its final form satisfied the requirements of the basic hypothesis which it was designed to test. These requirements were earlier enunciated as a set of conditions.

Condition One (same instrument for self and others): The scale for eliciting self-descriptive attitudes is identical--except that the personal pronoun replaces "This person"--to the scale used by the respondent in describing each other-figure.

Condition Two (must permit comparative statistics): The scoring method for the self-scale is identical with the method used for the other scales. The Pearson product-moment method of correlation may be used to measure the degree of relationship between total scores (summed item scores on a scale) of any two scales, or between one scale and averaged scores of two or more other scales. Averaging scores posed the problem of whether the quantities being averaged were in the same order. Would the closer friendship of Peer No. 1 mark this score as of a different order from Peer No. 4 ? An answer is provided by Shen, who asked a large number of students to rate on a personality rating scale peers of different degrees of friendship to the subject. Shen concluded that: ". . . friendship does not affect the accuracy of the ratings in any consistent manner."¹²

¹²E. Shen, "The Influence of Friendship on Personality Ratings," Journal of Applied Psychology, IX (1925), p. 67.

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Condition Three (uni-dimensionality of the scale): In the pooled opinion of twenty competent judges, the items of the scale are satisfactorily uni-dimensional. Correlations between item scores and full scale scores demonstrated that the scale is internally consistent.

Condition Four (attitudes to be at conscious level): All items refer to directly perceived behavior. No measure of indirect fantasy behavior is incorporated.

Condition Five (level of difficulty): Six competent adults edited the items for, among other things, level of difficulty. An earlier instrument was discarded chiefly because of its demands upon concept-formation ability. Subjects in a sub-study sample later reported no difficulty with the test. Examiners were directed to clarify (but not alter) directions if they, who knew their examinees well, considered it necessary.

Condition Six (a)(adequate representation of other-figures): Other-figures in excess of seven--four peers, three adults--were reported by the sub-study volunteers to be on the periphery in terms of significance to the respondent. Although it is possible that a respondent may deem eight or ten persons to have a strong influence on his life, nowhere does the literature on interpersonal relations theory cite numbers that large. (b)(degree of relative significance): Respondents were asked to place in rank-order the four peers and three adults separately in terms of relative significance to the self.

(c)(separate measuring of others): Respondents indicated their conceptualization of other persons separately beginning with the most significant peer and ending with the third-most-significant adult.

Condition Seven (a)(length of test): The decision was made, aided by a sub-study undertaken shiefly for that purpose, to set the length at that which could be administered in one classroom period. This time includes ten minutes for directions and assembling and twenty-five minutes for completing the scales. (b)(public relations): Eliminated from the test were features which might provoke adverse public reaction. School authorities examined the test with particular reference to public reaction before permitting its use within the school system.

The test was now complete. In its final form it contained eight scales of twenty items each, a page of instructions and figure-selections, and the sheet of instructions to the examiner. In this thesis it is referred to as the Interpersonal Attitude Scale (Form D-S), or by the simple abbreviation IAS.¹³

¹³See "Interpersonal Attitude Scale," Appendix E, pp. 85-95.

(1) The Commission has received information from the Government of the United Kingdom that the Government of the United Kingdom has decided to grant a concession to the Government of the United Kingdom in the form of a loan of £100 million to the Government of the United Kingdom for the purpose of financing the construction of a new airport at Heathrow.

(2) The Commission has also received information from the Government of the United Kingdom that the Government of the United Kingdom has decided to grant a concession to the Government of the United Kingdom in the form of a loan of £100 million to the Government of the United Kingdom for the purpose of financing the construction of a new airport at Heathrow.

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CHAPTER V

TESTING HYPOTHESES

Administering the IAS

The Interpersonal Attitude Scale (Form D-S) was administered to 101 grade nine pupils of both sexes. Eighty were tested on May 22nd and 24th, 1957. This group comprised the entire grade nine class at an urban junior high school located in an older residential area of working class families. Twenty-one more, a grade nine class in a similar residential area, were tested May 28th. Of the 101 respondents, fifty-two identified themselves as boys, forty-four as girls, and five failed to indicate their sex. Assuming an expected frequency of forty-eight (one-half of ninety-six) respondents of each sex, an observed departure of four (48 - 44, 52 - 48) from the expected could occur in approximately fifty per cent. of trials due to chance. (For a Chi-square of .51 with 1 df., $p = .50$ approximately.) It can therefore be reported with confidence that no significant sex differences existed in the composition of the sample.

The age distribution of the sample showed a median age of fifteen years, four months. The age range was from 12-1 to 18-3 and the interquartile range was 14-10 to 15-9.

Prior to the administration of the IAS, interviews were held with the teachers who were to administer the scale. During these inter-

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views the purpose of the investigation and procedure for administering the IAS were discussed. After administration of the scale, teachers reported that time limits were ample, that instructions were clear and that the pupils exhibited a serious and enthusiastic attitude towards the test. One paper was eliminated because the pupil, called from the room, was unable to complete the essential self-rating page.

Statistical Findings

The respondent's full scale score on the final page of the test, eliciting attitudes toward self, was used as the independent variable. Against it were correlated these dependent variables:

(1) the score on the first scale in the test (attitudes toward most significant peer), (2) the score on the fifth scale in the test (attitudes toward most significant adult), (3) the average of scores on the first four scales in the test (attitudes toward four significant peers), (4) the average of scores on the fifth, sixth and seventh scales in the test (attitudes toward three significant adults), and (5) the average of scores on the first seven scales in the test (attitudes toward all significant other-figures selected by the respondent). These correlations appear in Table 4.

Sex differences were investigated, using the same variables mentioned in the previous paragraph. The fifty-two boys' papers were separated from the forty-four girls' papers and correlations were computed for each sex as though they were two separate populations. The correlations and the sex differences appear in Table 5.

The Hypotheses Discussed

Hypothesis one states that grade nine pupils' attitudes of dominance-submissiveness used in describing the self are correlated with their dominance-submissiveness attitudes describing others.

TABLE 4
CORRELATIONS BETWEEN ATTITUDES TOWARD SELF
AND ATTITUDES TOWARD OTHERS AMONG
101 GRADE NINE PUPILS

y-Variable	x-Variable	r_{xy}	z-trans- formation
Attitudes toward:	Attitudes toward:		
1. Self	Peer No. 1	.32 ^a	.33 ^b
2. Self	Adult No. 1	.31	.32
3. Self	All Peers (averaged)	.33	.34
4. Self	All Adults (averaged)	.38	.40
5. Self	All Other-Figures (avgd.)	.44	.47

^aAll r's are positive and are significant at the .01 level.

^bA difference of .28 between z's is required for .05 level significance.

Table 4 indicates positive correlation coefficients which depart from zero correlation to a degree which could be attributed to chance factors alone in fewer than one per cent. of trials. We may therefore mark hypothesis one supported, and report with confidence that, in an incidental sample of 101 Edmonton grade nine pupils, those who regard themselves as dominant persons tend also to regard others of their interpersonal environment as dominant. Conversely those that regard themselves as submissive tend to consider others submissive.

Hypothesis two states that the correlation between attitudes to self and attitudes to peers is not significantly different from the correlation between attitudes to self and attitudes to adults. This is the null hypothesis, postulating a zero difference between self-peers correlations and self-adults correlations. Table 4 indicates correlations of .32 between self and most significant peer, and .31 between self and most significant adult. This table also provides correlations of .33 between the self and the average of all self-selected peers and .38 between the self and the average of all self-selected adults. Testing the significance of differences between correlation coefficients requires the use of Fisher's z-transformation, also provided in Table 4. In a sample of 101 an observed difference between z's of .28 is necessary to obtain significance at the .05 level of confidence. A difference of .24 is necessary at the .10 level. Since the observed z-difference between Self-Peer No. 1 and Self-Adult No. 1 is .01 and the observed difference between Self-Average Peers and Self-Average Adults is .06, both differences fall far short of obtaining significance. Therefore we may accept the null hypothesis and conclude that in our incidental sample the subjects show no significant difference between attitudes toward peers and adults, and no significant preference in attitudes for either peers or adults by the degree to which their self-attitudes are related to their attitudes toward others.

Hypothesis three states that boys and girls do not differ in the degree to which their self-attitudes are correlated with their attitudes toward others. This null hypothesis places a zero difference

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between the sexes in their response to the IAS. Table 5 provides product-moment correlations obtained from attitudes toward self and each of five dependent variables.

TABLE 5
DIFFERENCES BETWEEN 52 GRADE NINE BOYS AND 44
GRADE NINE GIRLS WITH RESPECT TO ATTITUDES
TOWARD SELF AND OTHERS

y-Variable	x-Variable	r_{xy} Boys	r_{xy} Girls	r- Diff.	z- Diff.*
Attitudes toward:	Attitudes toward:				
1. Self	Peer No. 1	.34	.25	.09	.09
2. Self	Adult No. 1	.37	.16	.21	.23
3. Self	All Peers (averaged)	.38	.29	.09	.10
4. Self	All Adults (averaged)	.56	.45	.11	.15
5. Self	All other-figures (avg.)	.48	.29	.19	.22

*A z-difference of .35 is required for significance at the .10 level, of .41 at the .05 level.

Again using the z-transformation, z-differences between sexes range from .09 (peer No. 1) to .23 (adult No. 1). Because of the reduced number in each sample ($N_{\text{boys}} = 52$, $N_{\text{girls}} = 44$), a z-difference of .41 is required for the observed difference to be significant at the .05 level of confidence. Obtained z-differences fall short of this requirement. The critical ratio of the largest sex difference is only 1.10. Obtained critical ratios of 1.10 and smaller indicate that every observed sex difference in Table 5 could occur in more than

twenty-seven per cent. of trials due to chance operations. Therefore we may accept the null hypothesis and conclude that our group of fifty-two boys and forty-four girls are drawn from a common population with respect to interpersonal attitudes elicited by the IAS.

Inspection of Table 5 reveals that, although sex differences are statistically non-significant, all differences are in one direction. Boys' papers yielded consistently higher correlations than girls'. Testing significance of differences in one direction only, or testing the significance of the superiority of one measure over another, requires the .10 level of confidence in place of the .05 level. The z-transformation indicates that the largest z-difference falls short of the difference of .35 required to mark as significant the superiority of boys' correlations over girls'. The obtained difference in the direction of boys' correlations could be expected in more than thirteen per cent. of trials due to the operations of chance.

The tests of significance conclusively support hypothesis three. Observed differences could easily be accounted for by chance. However, the fact that within the group tested in this study the boys tended to associate their self-attitudes with their attitudes to others to a greater degree than did the girls, is worthy of comment. This tendency was most pronounced within the adult No. 1 variable. Boys, to a greater degree than girls, tended to associate their self-concept, in so far as the dominance-submissiveness dimension is concerned, with their concept of the single adult who was most important to them. That this sex difference was reduced when boys and girls associated

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their self concepts with their conceptualizations of their peers is also suggested by the data.

It is accepted practice that a trait be understood as a continuum, normally distributed in a given population, before the product-moment method of correlation is employed. For this purpose, hypothesis four, stating that dominance-submissiveness attitudes toward self and toward others are normally distributed among grade nine pupils, was enunciated. Only when an obtained distribution departs from normalcy to a degree not reasonably attributable to chance, may the hypothesis be rejected.

The instrument used in testing this hypothesis was the Interpersonal Attitude Scale (Form D-S), the construction and administration of which has been described earlier. The sample of 101 grade nines has also been described. It must be noted at this time that the instrument, a Likert-type attitude scale, does not have its items normalized or scaled as in the Thurstone and Guttman methods. Rather, the items fall into two distinct positive and negative categories: dominance and submissiveness items in this case. Each category will contain both extreme and moderate statements of that category but no attempt is made to provide for a bunching of items in the middle of the continuum.

One measure of the divergence of a distribution from normalcy is its skewness--its asymmetry; another is its kurtosis--its peakedness or flatness.

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Using, as a formula for skewness,¹ $Sk = (P_{90} + P_{10})/2 - P_{50}$, the distribution of dominance-submissiveness attitudes toward self of 101 Edmonton grade nines has a skewness of + 1.78. The skewness of the normal curve is, of course, zero. The critical ratio of the difference, calculated at 1.76, indicates that an obtained difference of 1.78 could occur because of chance in eight per cent. of trials. We may conclude that the distribution of dominance-submissiveness attitudes tends to be positively skewed to a degree which just fails of representing a departure from normalcy significant at the .05 level of confidence.

Using, as a formula for kurtosis,² $Ku = Q/(P_{90} - P_{10})$, the obtained distribution of dominance-submissiveness attitudes toward self has a kurtosis of .246. The kurtosis of the normal curve is .263. The critical ratio calculated at .61 indicates that an obtained difference of .017 (.263 - .246) could occur by chance in fifty-four per cent. of trials. Therefore we may conclude with confidence that a distribution of 101 grade nine pupils tested for dominance-submissiveness attitudes toward self does not represent a significant deviation from normal kurtosis.

To test the normalcy of the distributions of attitudes toward others, the above procedure was carried out with each of five other variables including attitudes toward: (1) most significant peer, (2)

¹Henry E. Garrett, Statistics in Psychology and Education. (New York: Longmans Green and Co., 1953), formula 20, p. 99.

²ibid., formula 21, p. 100.

1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part of the report is devoted to a detailed analysis of the economic situation in the country. It is divided into two main sections: the first section deals with the agricultural sector, and the second section deals with the industrial sector. In the agricultural sector, the report discusses the state of the various crops, the state of the livestock, and the state of the fishing industry. In the industrial sector, the report discusses the state of the various industries, including the textile industry, the food processing industry, and the manufacturing industry. The report also discusses the state of the construction industry and the state of the services sector.

3. The third part of the report is devoted to a detailed analysis of the social situation in the country.

4. The fourth part of the report is devoted to a detailed analysis of the political situation in the country. It discusses the state of the various political parties, the state of the government, and the state of the opposition. It also discusses the state of the various social movements and the state of the various interest groups. The report also discusses the state of the various international organizations and the state of the various international relations.

5. The fifth part of the report is devoted to a detailed analysis of the cultural situation in the country. It discusses the state of the various cultural institutions, the state of the various cultural activities, and the state of the various cultural movements. It also discusses the state of the various cultural policies and the state of the various cultural programs.

6. The sixth part of the report is devoted to a detailed analysis of the environmental situation in the country. It discusses the state of the various natural resources, the state of the various environmental problems, and the state of the various environmental policies.

7. The seventh part of the report is devoted to a detailed analysis of the foreign relations situation in the country. It discusses the state of the various international relations, the state of the various international organizations, and the state of the various international policies.

most significant adult, (3) all peers, averaged, (4) all adults, averaged, and (5) the average of all other-figures, peers and adults. The distributions, together with indices of skewness and kurtosis and their critical ratios, are presented in Table 6.

TABLE 6

RELIABILITY OF MEASURES OF SKEWNESS AND KURTOSIS
IN DISTRIBUTIONS OF DOMINANCE-SUBMISSIVENESS
ATTITUDES AMONG 101 GRADE NINE PUPILS

Scores	Subjects' Attitudes Toward:					
	Self	Peer No. 1	Adult No. 1	Avg. All Peers	Avg. All Adults	Avg. All Others
90 - 94	1	-	1	-	-	-
85 - 89	2	2	5	-	1	-
80 - 84	6	3	6	1	3	2
75 - 79	11	10	14	8	4	7
70 - 74	15	24	25	22	17	29
65 - 69	35	28	27	42	23	49
60 - 64	20	21	12	26	40	13
55 - 59	8	10	7	2	12	1
50 - 54	2	1	2	-	-	-
45 - 49	-	1	-	-	-	-
40 - 44	-	1	-	-	-	-
N =	101	101	99	101	100	101
Normal Sk.	0	0	0	0	0	0
Obtained Sk.	+ 1.78	- 0.04	+ 1.06	+ 0.43	+ 2.04	+ 0.39
SE _{Sk}	1.01	0.96	1.15	0.68	0.79	0.58
Crit. Ratio	1.76 *	0.04	0.92	0.63	2.58 *	0.67
Normal Ku.	.263	.263	.263	.263	.263	.263
Obtained Ku.	.246	.266	.226	.258	.268	.266
SE _{Ku}	.028	.028	.028	.028	.028	.028
Crit. Ratio	.61	.11	1.32	.18	.18	.11

* Fiducial limits, df = 100: .05 level = 1.98; .01 level = 2.63

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Table 1						Total
1	2	3	4	5	6	
1	1	1	1	1	1	6
2	2	2	2	2	2	12
3	3	3	3	3	3	18
4	4	4	4	4	4	24
5	5	5	5	5	5	30
6	6	6	6	6	6	36
7	7	7	7	7	7	42
8	8	8	8	8	8	48
9	9	9	9	9	9	54
10	10	10	10	10	10	60
11	11	11	11	11	11	66
12	12	12	12	12	12	72
13	13	13	13	13	13	78
14	14	14	14	14	14	84
15	15	15	15	15	15	90
16	16	16	16	16	16	96
17	17	17	17	17	17	102
18	18	18	18	18	18	108
19	19	19	19	19	19	114
20	20	20	20	20	20	120
21	21	21	21	21	21	126
22	22	22	22	22	22	132
23	23	23	23	23	23	138
24	24	24	24	24	24	144
25	25	25	25	25	25	150
26	26	26	26	26	26	156
27	27	27	27	27	27	162
28	28	28	28	28	28	168
29	29	29	29	29	29	174
30	30	30	30	30	30	180
31	31	31	31	31	31	186
32	32	32	32	32	32	192
33	33	33	33	33	33	198
34	34	34	34	34	34	204
35	35	35	35	35	35	210
36	36	36	36	36	36	216
37	37	37	37	37	37	222
38	38	38	38	38	38	228
39	39	39	39	39	39	234
40	40	40	40	40	40	240
41	41	41	41	41	41	246
42	42	42	42	42	42	252
43	43	43	43	43	43	258
44	44	44	44	44	44	264
45	45	45	45	45	45	270
46	46	46	46	46	46	276
47	47	47	47	47	47	282
48	48	48	48	48	48	288
49	49	49	49	49	49	294
50	50	50	50	50	50	300
51	51	51	51	51	51	306
52	52	52	52	52	52	312
53	53	53	53	53	53	318
54	54	54	54	54	54	324
55	55	55	55	55	55	330
56	56	56	56	56	56	336
57	57	57	57	57	57	342
58	58	58	58	58	58	348
59	59	59	59	59	59	354
60	60	60	60	60	60	360
61	61	61	61	61	61	366
62	62	62	62	62	62	372
63	63	63	63	63	63	378
64	64	64	64	64	64	384
65	65	65	65	65	65	390
66	66	66	66	66	66	396
67	67	67	67	67	67	402
68	68	68	68	68	68	408
69	69	69	69	69	69	414
70	70	70	70	70	70	420
71	71	71	71	71	71	426
72	72	72	72	72	72	432
73	73	73	73	73	73	438
74	74	74	74	74	74	444
75	75	75	75	75	75	450
76	76	76	76	76	76	456
77	77	77	77	77	77	462
78	78	78	78	78	78	468
79	79	79	79	79	79	474
80	80	80	80	80	80	480
81	81	81	81	81	81	486
82	82	82	82	82	82	492
83	83	83	83	83	83	498
84	84	84	84	84	84	504
85	85	85	85	85	85	510
86	86	86	86	86	86	516
87	87	87	87	87	87	522
88	88	88	88	88	88	528
89	89	89	89	89	89	534
90	90	90	90	90	90	540
91	91	91	91	91	91	546
92	92	92	92	92	92	552
93	93	93	93	93	93	558
94	94	94	94	94	94	564
95	95	95	95	95	95	570
96	96	96	96	96	96	576
97	97	97	97	97	97	582
98	98	98	98	98	98	588
99	99	99	99	99	99	594
100	100	100	100	100	100	600

Table 2						Total
1	2	3	4	5	6	
1	1	1	1	1	1	6
2	2	2	2	2	2	12
3	3	3	3	3	3	18
4	4	4	4	4	4	24
5	5	5	5	5	5	30
6	6	6	6	6	6	36
7	7	7	7	7	7	42
8	8	8	8	8	8	48
9	9	9	9	9	9	54
10	10	10	10	10	10	60
11	11	11	11	11	11	66
12	12	12	12	12	12	72
13	13	13	13	13	13	78
14	14	14	14	14	14	84
15	15	15	15	15	15	90
16	16	16	16	16	16	96
17	17	17	17	17	17	102
18	18	18	18	18	18	108
19	19	19	19	19	19	114
20	20	20	20	20	20	120
21	21	21	21	21	21	126
22	22	22	22	22	22	132
23	23	23	23	23	23	138
24	24	24	24	24	24	144
25	25	25	25	25	25	150
26	26	26	26	26	26	156
27	27	27	27	27	27	162
28	28	28	28	28	28	168
29	29	29	29	29	29	174
30	30	30	30	30	30	180
31	31	31	31	31	31	186
32	32	32	32	32	32	192
33	33	33	33	33	33	198
34	34	34	34	34	34	204
35	35	35	35	35	35	210
36	36	36	36	36	36	216
37	37	37	37	37	37	222
38	38	38	38	38	38	228
39	39	39	39	39	39	234
40	40	40	40	40	40	240
41	41	41	41	41	41	246
42	42	42	42	42	42	252
43	43	43	43	43	43	258
44	44	44	44	44	44	264
45	45	45	45	45	45	270
46	46	46	46	46	46	276
47	47	47	47	47	47	282
48	48	48	48	48	48	288
49	49	49	49	49	49	294
50	50	50	50	50	50	300
51	51	51	51	51	51	306
52	52	52	52	52	52	312
53	53	53	53	53	53	318
54	54	54	54	54	54	324
55	55	55	55	55	55	330
56	56	56	56	56	56	336
57	57	57	57	57	57	342
58	58	58	58	58	58	348
59	59	59	59	59	59	354
60	60	60	60	60	60	360
61	61	61	61	61	61	366
62	62	62	62	62	62	372
63	63	63	63	63	63	378
64	64	64	64	64	64	384
65	65	65	65	65	65	390
66	66	66	66	66	66	396
67	67	67	67	67	67	402
68	68	68	68	68	68	408
69	69	69	69	69	69	414
70	70	70	70	70	70	420
71	71	71	71	71	71	426
72	72	72	72	72	72	432
73	73	73	73	73	73	438
74	74	74	74	74	74	444
75	75	75	75	75	75	450
76	76	76	76	76	76	456
77	77	77	77	77	77	462
78	78	78	78	78	78	468
79	79	79	79	79	79	474
80	80	80	80	80	80	480
81	81	81	81	81	81	486
82	82	82	82	82	82	492
83	83	83	83	83	83	498
84	84	84	84	84	84	504
85	85	85	85	85	85	510
86	86	86	86	86	86	516
87	87	87	87	87	87	522
88	88	88	88	88	88	528
89	89	89	89	89	89	534
90	90	90	90	90	90	540
91	91	91	91	91	91	546
92	92	92	92	92	92	552
93	93	93	93	93	93	558
94	94	94	94	94	94	564
95	95	95	95	95	95	570
96	96	96	96	96	96	576
97	97	97	97	97	97	582
98	98	98	98	98	98	588
99	99	99	99	99	99	594
100	100	100	100	100	100	600

In summary, ten of twelve tests of skewness and kurtosis involving the six distributions fail to exhibit a significant departure from normalcy. Significant skewness is apparent in the respondents' attitudes toward adults and there is a tendency for respondents' attitudes toward self to be skewed. None exhibit a significant deviation from normal kurtosis. Therefore, without undue violence to our findings, we may assume that hypothesis four receives convincing support, and conclude that, among 101 Edmonton grade nine pupils, attitudes of dominance-submissiveness toward self and toward others closely approach a normal distribution.

CHAPTER VI

CONCLUSION

Within the general problem of finding research support for the clinically validated interpersonal relations theory of personality, this thesis has studied the specific problem of the relationship between an individual's attitudes toward himself and toward those closest to him. These attitudes were on dominant and submissive behavior. Persons closest to him were identified by his forced self-selection of four peers and three adults, listed in rank-order separately in terms of their relative importance to himself. Our subject expressed the relationship under consideration by a forced multiple-choice response to descriptive statements referring to each other-figure and to himself.

The instrument with which our subjects provided the data required for a study of the basic problem was the Interpersonal Attitude Scale (Form D-S). It was administered to an incidental sample of 101 Edmonton grade nine pupils in the spring of 1957. Teachers who had good rapport with the subjects served as examiners. The scale, produced by the present writer, was developed by (1) collecting all dominance-submissiveness items from available tests, (2) rewording the items into descriptive statement form applicable to both self and others, (3) editing the remaining statements according to established criteria with the assistance of six competent adults selected for that purpose, (4) logically validating each statement with the pooled opinion of

CHAPTER 1

Introduction

The purpose of this book is to provide a comprehensive overview of the field of artificial intelligence (AI).

This book is intended for students and researchers in the field of AI, as well as for those interested in the applications of AI in various domains.

The book is organized into several chapters, each covering a different aspect of AI.

The first chapter, "Introduction," provides an overview of the field of AI and its history.

The second chapter, "The Foundations of AI," discusses the basic principles and concepts of AI.

The third chapter, "The History of AI," traces the development of AI from its early beginnings to the present day.

The fourth chapter, "The Applications of AI," explores the various ways in which AI is being used in industry and society.

The fifth chapter, "The Future of AI," discusses the potential of AI and the challenges that lie ahead.

The sixth chapter, "The Ethics of AI," examines the moral implications of AI and the need for responsible AI development.

The seventh chapter, "The Impact of AI on Society," discusses the social and economic consequences of AI.

The eighth chapter, "The Conclusion," summarizes the key points of the book and offers final thoughts on the future of AI.

The book is written in a clear and concise style, making it accessible to a wide range of readers.

The book is also accompanied by a series of exercises and projects, designed to help readers apply the concepts they have learned.

The book is a valuable resource for anyone interested in the field of AI, and it is hoped that it will provide a solid foundation for further study and research.

The book is written by a team of experts in the field of AI, and it is hoped that it will provide a comprehensive and up-to-date overview of the field.

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twenty competent adults selected as judges, (5) purifying the remaining list of statements with the test of internal consistency made possible by the responses of seventy-four pupils similar to the final test group, (6) obtaining a test-retest reliability coefficient based on two successive administrations of the scale one week apart to forty-three grade nine pupils, (7) determining the length of the test with the help of a small sub-study run chiefly for that purpose, (8) freeing the scale from elements which could provoke adverse public reaction, and (9) making every effort to elicit valid responses from the scale.

The specific purpose of the instrument was to gather data with which to test four experimental hypotheses: (1) grade nine pupils' attitudes of dominance-submissiveness used in describing the self are correlated with their dominance-submissiveness attitudes describing others, (2) grade nine pupils relate their self-attitudes with their attitudes toward peers to the same degree as they relate their self-attitudes with their attitudes toward adults, (3) grade nine boys and grade nine girls do not differ significantly in the degree to which their self-attitudes are correlated with their attitudes toward others, and (4) attitudes of dominance-submissiveness toward self and toward others closely approach a normal distribution among grade nine pupils.

The data obtained from the instrument and from the test population, considering the limitations of each, support all four hypotheses. This finding is slightly qualified by these observations: (1) Correlations supporting hypothesis one, although positive and

highly significant, were of moderately low order, ranging in size from .31 to .44. (2) The non-significant sex differences supporting hypothesis three contained distinct tendencies: boys produced consistently higher correlations than girls; the greater magnitude of boys' correlations was most evident within the adult No. 1 variable and smallest within the peer No. 1 and all peers variables. (3) Although none of the six distributions showed a significant deviation from normal kurtosis, one, attitudes toward all others, was significantly skewed and the skewness of another, attitudes toward self, just failed to be significant.

Problems Arising from the Study

The first question this study begs is, "What accounts for the correlations?" We have shown that A is associated with B but have not indicated whether this is a direct association or one effected by the operations of an intervening variable, C. If the latter is true, the problem of defining C must ultimately be faced. It would be within the scope of interpersonal theory to define this intervening variable as "personality", the relatively enduring pattern of interpersonal situations which characterize a human life. This is, of course, only a hypothetical construct, but it is one which would conveniently explain A's association with B. Not only more research but also more theoretical formulation is necessary to answer this question.

"Is the relationship between A and B a causal relationship and, if so, in which direction lies the causality?" This second question

asks whether A (or A through C) causes B, or whether B (or B through C) causes A. The self may be thought of as construing its interpersonal environment in its own terms, or may be thought of as a function, successively construing itself in terms of its interpersonal world. Opinion is divided on this question; self-theory supports the former position, interpersonal theory the latter. To offer the hypothesis that if causality obtains it operates in both directions is but an escape. Clearly more research is indicated.

A little more information is available for the next two questions. First, why are the correlations low (.31 - .44) ? Jersild's observation is enlightening; he writes: "Persons in high school and college appraised themselves in terms of social relationships somewhat more often than did the younger people. . . ."¹ This does not weaken the general theory but it indicates that fifteen-year-olds may lack a fully developed ability to conceptualize their relationships. Even then, there may be intervening variables operating against the conceptualization process. Next, what accounts for the observed sex differences? Chance, perhaps. But in the sample studied (median age 15-4, age-range 12-1 to 18-3) the girls will have been farther along in the process of physical maturation. Consequently, their self-identifications may have shifted from adults to peers to a greater degree than those of the boys. This question, however, is complicated because the IAS does not ask the

¹Jersild, op. cit., p. 45.

respondent to reveal the identity of Adult No. 1. There was very little difference between boys and girls in relation to the average of all selected adults.

The present study is set within the problem of finding research support for a general theory of personality. A measure of support was accorded to the one premise recognized as most essential to the general theory. Even in developing this support some problems have arisen which, with certain principles of the general theory not touched in this study, will require further investigation before the interpersonal relations theory can become a fully validated approach to the interpretation of human behavior.

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APPENDIX

APPENDIX A

FORM USED FOR EDITING ITEMS

Editor's Name _____

EDITING OF STATEMENTS

The following is a list of statements for describing persons. A subject may read through this list and indicate how well each statement describes a specific other person, or, at another time, himself. The other persons will be both peers and adults. The final list will probably contain fewer than one-half of these presently listed, selection being made through editing, logical validation and statistical measures. I would be pleased if you would assist in the first step, editing.

Please edit these statements in this manner. Ask yourself: "Would a boy or girl of about fifteen years of age readily understand this statement?", "Is the grammar or vocabulary unsuitable to boys and girls of this age?", "Is the meaning unclear or ambiguous?", "Is this statement identical in meaning, or nearly so, with another statement in the list?" and so forth. Please ~~make~~ any changes in wording you consider desirable, and do not hesitate to label a statement "unsatisfactory" if no changes can be made to improve upon it. If you consider a statement good as it stands, simply leave blank the space below it.

Thank you,
A. F. Brown.

1. This person likes to tell others what to do.
2. This person thinks too much of himself -- is conceited.
3. This person expects everyone to admire him.
4. This person is bossy.
5. This person is domineering, likes to control others.
6. This person tries to be too successful in his activities with others.

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7. This person wants to manage other people.
8. This is the kind of person who is often giving advice.
9. This person acts important.
10. This person likes to brag or boast.
11. This person acts proud.
12. This person acts snobbish with others.
13. Others readily obey this person.
14. This person is respected by others.
15. This person is admired by others.
16. This person makes a good impression on others.
17. This person likes having responsibility
18. This person is a good leader.
19. This person has a forceful personality.
20. This person seems to be independent, -- does things on his own.
21. This person shows confidence in himself.
22. Others think well of this person.
23. This person is not afraid to assert himself.
24. This person is able to give orders.
25. This person shows a good deal of self-respect.
26. This person stands up for his rights.
27. This person seems pleased with himself.
28. This person can take care of himself.
29. This person does not care about what other people do.
30. This person is businesslike in dealing with people.
31. This person likes to compete with others.
32. This person thinks only of himself.
33. This person handles other people easily.

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34. This person is selfish.
35. This person is not afraid to say "No" to others.
36. This person is selfish.
37. This person usually gives in to others.
38. This person is easily led.
39. This person lets others "walk all over him".
40. This person obeys others too willingly.
41. This person seems to have no mind or will of his own.
42. This person is meek or humble, -- seems to feel small with others.
43. This is a weak or spineless person.
44. This person usually feels too grateful for what others do.
45. This person runs himself down.
46. This person appears too apologetic in front of others.
47. This person gets embarrassed easily.
48. This person has little self-confidence.
49. This person likes to make himself suffer.
50. This person is shy or timid with others.
51. This person always seems to feel ashamed of himself.
52. This person is modest, not bold with others.
53. This person is obedient.
54. This person tries to imitate the people he admires.
55. This person is very respectful to those in authority.
56. This person depends on others too much.
57. This person wants to be led by others.
58. This person acts like a "clinging vine" or "hanger-on".
59. This person seldom talks back.

60. This person is afraid of people who are strong.
61. This person is a hero-worshipper.
62. This person often asks for help from others.
63. This person appreciates what others do.
64. This person is anxious to have the approval of others.
65. This person trusts others.
66. This person lets others make the decisions.
67. This person is easily fooled or "taken in".
68. This is the kind of person who wants others to look after him.
69. This person is the follower in the group.
70. This person needs others to show him what to do.
71. This person accepts advice readily.
72. This person is eager to please others.

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APPENDIX B
LOGICAL VALIDATION INSTRUMENT

In its original form the instrument used for the logical validation of test items was mimeographed on four sheets of foolscap size paper. The first page supplied instructions to those who would rate the items. The second contained dominance items; the third, submissiveness items. The last page provided a space for general comments. To contain the instrument in the present binding the second and third pages were broken and typed in three pages and the width of the column headed WHY "UNSATISFACTORY"? was reduced. The instrument is otherwise presented in its entirety.

2. Results

2.1. Descriptive statistics

The first part of the analysis describes the sample and the variables used. The sample consists of 1,000 observations, which are randomly selected from the population of 10,000. The variables used are: age, sex, income, education, and health status. The descriptive statistics for these variables are presented in Table 1. The mean age is 45.2, the mean income is \$45,000, and the mean education level is 12.5 years. The health status is categorized into three groups: good, fair, and poor. The distribution of health status is 60% good, 30% fair, and 10% poor.

LOGICAL VALIDATION OF THE INTERPERSONAL ATTITUDE SCALE

The list of statements on the following pages comprise one step in the development of an instrument to investigate the "interpersonal relations" theory of personality. The final scale will be used by fifteen-year-old boys and girls who will rate themselves and certain other persons close to themselves (peers and adults) on a DOMINANCE-SUBMISSIVENESS continuum.

You are being asked to assist in the "logical validation" of the statements. Phrases and statements showing dominant and submissive attitudes were collected from various sources and many were excluded because of overlap or other reasons. A group of editors edited the remaining list for grammar, vocabulary level and ambiguity. We are now asking you to rate the present items according to how well each item can be expected to elicit a dominant or submissive attitude.

To rate an item as very satisfactory, check the "VS" column beside this item. If it is satisfactory, check the "S" column. If you judge the item to be an unsatisfactory representation of the attitude in question, please check the "U" column and write a brief reason for your choice in the space to the right. Please do not feel hesitant about using the "U" category.

DOMINANCE ITEMS	VS	S	U	WHY "UNSATISFACTORY" ?
1. This person likes to tell others what to do.				
2. This person thinks too much of himself--is conceited.				
3. This person expects everyone to admire him.				
4. This person is bossy.				
5. This person is domineering -- likes to control others.				
6. This person tries to be too successful in his activities with others.				
7. This person wants to manage other people.				
8. This person is the kind who is often giving advice.				
9. This person acts important.				
10. This person likes to brag or boast.				
11. This person acts proud.				
12. This person acts snobbish with some people.				
13. This person is readily obeyed by others.				
14. This person is respected by others.				
15. This person is admired by many other people.				
16. This person makes a good impression on others.				
17. This person likes having responsibility.				
18. This person is a good leader.				
19. This person seems to be independent -- does things on his own.				
20. This person is very confident of himself.				
21. This person is well thought of by many.				
22. This person is not afraid to lead in a group.				
23. This person has the ability to give orders.				
24. This person stands up for his rights.				

25. This person seems pleased with himself.				
26. This person is able to look after his own interests.				
27. This person does not care about what other people do.				
28. This person likes to compete with others.				
29. This person thinks only of himself.				
30. This person handles other people easily.				
31. This person is not afraid to say "No" to others.				
32. This person is dependable.				

SUBMISSIVENESS ITEMS	VS	S	U	WHY "UNSATISFACTORY" ?
33. This person usually gives in to others.				
34. This person is easily led.				
35. This person lets others "walk all over him".				
36. This person obeys others too willingly.				
37. This person seems to have no mind or will of his own.				
38. This person is meek or humble.				
39. This person is weak or spineless.				
40. This person feels too grateful for what others do for him.				
41. This person belittles himself -- "runs himself down".				
42. This person gets embarrassed easily.				
43. This person has little self-confidence.				
44. This person is shy or timid with other people.				
45. This person always seems to feel ashamed of himself.				

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the transparency and accountability of the organization. This section also outlines the various methods used to collect and analyze data, ensuring that the information is reliable and up-to-date.

2. The second part of the document focuses on the implementation of the proposed changes. It details the steps involved in the rollout process, from initial planning to final execution. This section also addresses potential challenges and provides strategies to overcome them, ensuring a smooth transition to the new system.

3. The third part of the document discusses the impact of the changes on the organization's overall performance. It presents data and analysis showing the positive effects of the implementation, such as increased efficiency and cost savings. This section also includes feedback from stakeholders and suggestions for further improvements.

4. The fourth part of the document provides a summary of the key findings and conclusions. It reiterates the importance of the changes and the successful outcome of the implementation. This section also includes a final statement of commitment to ongoing improvement and transparency.

5. The fifth part of the document is a conclusion that summarizes the main points of the document. It reiterates the importance of the changes and the successful outcome of the implementation. This section also includes a final statement of commitment to ongoing improvement and transparency.

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46. This person is modest.				
47. This person tries to imitate the People he admires.				
48. This person is very respectful to those in authority.				
49. This person depends on others too much.				
50. This person wants to be led by others.				
51. This person seldom talks back.				
52. This person is afraid of people who are strong.				
53. This person often asks for help from others.				
54. This person appreciates what others do for him.				
55. This person is anxious to be liked by others.				
56. This person trusts others.				
57. This person lets others make the decisions.				
58. This person is easily fooled or "taken in".				
59. This person is the "follower" in a group.				
60. This person needs others to show him what to do.				
61. This person accepts advice readily.				
62. This person is eager to please others.				
63. This person is the kind who wants others to look after him.				
64. This person is obedient.				

If you have some general reaction regarding the type of items, alternatives to items, additional items or a radical revision of wording, please use this space.

[The following text is extremely faint and largely illegible due to the quality of the scan. It appears to be a series of paragraphs or a list of items, but the specific content cannot be transcribed accurately.]

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APPENDIX C

INTERNAL CONSISTENCY TEST INSTRUMENT

In its original form the scale used for conducting the test of internal consistency was mimeographed on one sheet of foolscap size paper. To contain the instrument in the present binding it has been typed on two pages and the width of the spaces between the response categories has been reduced. Otherwise the instrument is presented in its entirety.

Date _____
Age: Yrs. __, Mos. __

INTERPERSONAL ATTITUDE SCALE

Initials _____
Check: Boy __ Girl __

Please Note: Directions will be read to you. Please take your time and give each item your careful thought. Your honesty will help others in understanding boys and girls.

- | | | | | | |
|--|----|---|---|---|----|
| 1. I like to tell others what to do. | SA | A | U | D | SD |
| 2. I let others "walk all over me" | SA | A | U | D | SD |
| 3. I lead in a group without showing fear | SA | A | U | D | SD |
| 4. I stand up for my rights. | SA | A | U | D | SD |
| 5. I am domineering, I like to control others | SA | A | U | D | SD |
| 6. I am easily led | SA | A | U | D | SD |
| 7. I am bossy | SA | A | U | D | SD |
| 8. I usually give in to others | SA | A | U | D | SD |
| 9. I obey others willingly | SA | A | U | D | SD |
| 10. I let others make the decisions | SA | A | U | D | SD |
| 11. I am a "Follower" in a group | SA | A | U | D | SD |
| 12. I am readily obeyed by others | SA | A | U | D | SD |
| 13. I want to manage other people | SA | A | U | D | SD |
| 14. I let others show me what to do | SA | A | U | D | SD |
| 15. I am a weak or spineless person | SA | A | U | D | SD |
| 16. I seldom talk back | SA | A | U | D | SD |
| 17. I take on responsibility easily | SA | A | U | D | SD |
| 18. I belittle myself -- "run myself down" Before others | SA | A | U | D | SD |
| 19. I give orders | SA | A | U | D | SD |
| 20. I handle other people easily | SA | A | U | D | SD |

1. The first part of the report is devoted to a general description of the project and its objectives. It also includes a brief overview of the methodology used in the study.

2. The second part of the report presents the results of the study. It is divided into several sections, each dealing with a different aspect of the project. The first section discusses the data collected during the study, while the second section presents the analysis of this data. The third section discusses the conclusions drawn from the study, and the fourth section presents the recommendations for future research.

3. The third part of the report is devoted to a discussion of the limitations of the study and the implications of the findings. It also includes a brief overview of the conclusions drawn from the study and the recommendations for future research.

4. The fourth part of the report is devoted to a discussion of the limitations of the study and the implications of the findings. It also includes a brief overview of the conclusions drawn from the study and the recommendations for future research.

5. The fifth part of the report is devoted to a discussion of the limitations of the study and the implications of the findings. It also includes a brief overview of the conclusions drawn from the study and the recommendations for future research.

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10. The tenth part of the report is devoted to a discussion of the limitations of the study and the implications of the findings. It also includes a brief overview of the conclusions drawn from the study and the recommendations for future research.

21. I am often giving advice	SA	A	U	D	SD
22. I act shy or timid with others	SA	A	U	D	SD
23. I compete with others	SA	A	U	D	SD
24. I am not afraid to say "No" to others	SA	A	U	D	SD
25. I am very respectful to those in authority	SA	A	U	D	SD
26. I often ask for help from others	SA	A	U	D	SD
27. I appear meek or humble	SA	A	U	D	SD
28. I act with self-confidence	SA	A	U	D	SD
29. I act upon advice readily	SA	A	U	D	SD
30. I appear to want others to look after me	SA	A	U	D	SD
31. I am respected by others	SA	A	U	D	SD
32. I openly try to make a good impression on other people	SA	A	U	D	SD

APPENDIX D
SUB-STUDY INSTRUMENT

The Interpersonal Attitude Scale administered to the sub-study group contained a page of instructions, a page of statements lacking response categories, and a pad of sixteen answer strips. These strips included ten identical with the one presented in this appendix. Since the remaining six differed from these ten and among themselves by their headings only, just the headings are presented herein.

INTERPERSONAL ATTITUDE SCALE

INSTRUCTIONS

This is a test to help the examiner understand boys and girls of your age, and some of the people who have played a part in your life.

Inside this book are 22 statements to describe persons you know, including yourself. There are also 16 answer sheets, one for each person you will describe. You will describe them by using the letters SA, A, U, D or SD, with each statement on the answer sheets. Here is what these letters mean:

- SA--Strongly Agree . "So far as I know this person, I would strongly agree that this statement describes him."
A--Agree "So far as I know this person, I would simply agree that this statement describes him."
U--Undecided . . "I am undecided as to whether this statement does or does not describe this person."
D--Disagree . . . "So far as I know this person I would disagree with this statement in describing him."
SD--Strongly Disagree! "So far as I know this person, I would strongly disagree with this statement in describing him."

You will draw a circle around SA, A, U, D or SD, whichever will best describe the person whom you are rating on an answer sheet. (Note: Throughout the test, the words "he" or "him" appear. You read "she" or "her" when the person you are rating is a girl or woman.)

Who are the 16 persons you will rate? The first answer sheet asks you to describe your mother; the second, your father. The third asks you to describe a teacher you like; the fourth, a teacher you dislike. You may think of former teachers instead of present ones if you choose. The fifth sheet asks you to describe any other adult whom you know personally; write this person's name or initials on the space provided.

The next ten sheets represent any ten persons of about your age, boys or girls, whom you know personally. Please identify each person on the space provided by writing the first or last name, initials or any other identifying mark which will clearly bring this person to your mind. These persons may be close friends, former friends, present or past boy friends or girl friends, brothers or sisters, persons you know well in school, neighbourhood, clubs, church or jobs. They may be your rivals or "enemies" --persons you like or dislike, so long as you know them personally.

The last sheet is headed MYSELF pp this means you. Write your age, and circle "Boy" or "Girl" on this sheet. Don't write your name here, your name appears nowhere on this test. You will notice that each statement begins with "This person". When completing this last sheet you will think of "this person" as yourself.

THE HISTORY OF THE

REPUBLIC OF THE

UNITED STATES OF AMERICA

FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME

BY

JOHN

W. FULTON

OF THE

NEW YORK

INTERPERSONAL ATTITUDE SCALE

1. This person likes to tell others what to do.
2. This person is obedient.
3. This person wants to be led by others.
4. This person is not afraid to say "No" to others.
5. This person lets others make the decisions
6. This person seldom talks back.
7. This person can stand up for his rights.
8. Others readily obey this person.
9. This person is able to give orders
10. This person accepts advice readily
11. This person likes to compete with others
12. This person is a good leader
13. This person is bossy
14. This person depends on others too much
15. This person wants to manage other people ,
16. This person is easily led.
17. This person usually gives in to others
18. This person lets others "walk all over him".
19. This person is not afraid to assert himself.
20. This person likes having responsibility.
21. This person needs others to show him what to do.
22. This person is very respectful to those in authority . .

A person of about my age
whom I know personally:

The pad of answer strips contained
ten headed as the one to the right.
Headings of the other six strips
were:

1. MOTHER
2. FATHER
3. LIKED TEACHER
4. DISLIKED TEACHER
5. ANY OTHER ADULT:

6. MYSELF
Age:Yrs.____, Mos.____

Boy - Girl

... 1.	SA	A	U	D	SD
... 2.	SA	A	U	D	SD
... 3.	SA	M	U	D	SD
... 4.	SA	A	U	D	SD
... 5.	SA	A	U	D	SD
... 6.	SA	A	U	D	SD
... 7.	SA	A	U	D	SD
... 8.	SA	A	U	D	SD
... 9.	SA	A	U	D	SD
.. 10.	SA	A	U	D	SD
.. 11.	SA	A	U	D	SD
.. 12.	SA	A	U	D	SE
.. 13.	SA	A	U	D	SD
.. 14.	SA	A	U	D	SD
.. 15.	SA	A	U	D	SD
.. 16.	SA	A	U	D	SD
.. 17.	SA	A	U	D	SD
.. 18.	SA	A	U	D	SD
.. 19.	SA	A	U	D	SD
.. 20.	SA	A	U	D	SD
.. 21.	SA	A	U	D	SD
.. 22.	SA	A	U	D	SD

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1. The first part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: John Doe, Jane Smith, Bob Johnson, Alice Brown, and Charlie White. The addresses are: 123 Main St, 456 Elm St, 789 Oak St, 101 Pine St, and 202 Cedar St.

2. The second part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: David Green, Emily Black, Frank Gray, Helen White, and Isaac Brown. The addresses are: 303 Birch St, 404 Maple St, 505 Spruce St, 606 Fir St, and 707 Willow St.

3. The third part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: Jack Black, Karen White, Larry Brown, Mary Green, and Norman White. The addresses are: 808 Ash St, 909 Hickory St, 1010 Sycamore St, 1111 Chestnut St, and 1212 Walnut St.

4. The fourth part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: Olivia White, Peter Brown, Quinn Green, Robert White, and Sarah Black. The addresses are: 1313 Elm St, 1414 Oak St, 1515 Pine St, 1616 Cedar St, and 1717 Birch St.

5. The fifth part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: Thomas White, Ursula Brown, Victor Green, Wendy White, and Xavier Black. The addresses are: 1818 Maple St, 1919 Spruce St, 2020 Fir St, 2121 Willow St, and 2222 Ash St.

APPENDIX E

THE INTERPERSONAL ATTITUDE SCALE

EXAMINER'S INSTRUCTIONS FOR THE IAS

Pupils will need a pencil and, if possible, an eraser. Pen or ball-point will do but a pencil is better for them.

While distributing the tests say: "You will enjoy taking this test. You should find it a lot of fun and none of your results can be held against you. Your results are needed for part of a research study in understanding boys and girls of your age. You follow as I read."
(Read aloud the first two paragraphs.)

"Look at Step One. See the four spaces under AGE-MATES. These are persons of about your age, or within one or two years of your age. You will write the names or initials of four age-mates you know best on these four lines, beginning with the one who plays the biggest part in your life. These may include close friends, former friends, present or past boy friends or girl friends, brothers or sisters, even your 'enemies', so long as they are important to you. Fill these in now."
(Wait until this is done, then say:)

"Now do the same with the three lines under ADULTS. These may include either or both parents, teachers or other adults at the school, neighbours, relatives or any other adult you know personally. Begin with the adult the most important to you. Fill these in now."

(wait)

"Now, fill in the information called for in the box beside the word YOURSELF."

(wait)

"Look at Step Two. It reads (read it). Copy these now."

(wait)

"Turn to the answer sheets again. You will describe the person who is identified at the top of each page by using the letters you see down the right-hand side, SA, A, U, D or SD, with each statement. Now turn back to page one and look at the box with Step Three. Here is what these letters mean: (read aloud the contents of the box). (Next: read aloud the final paragraph.)

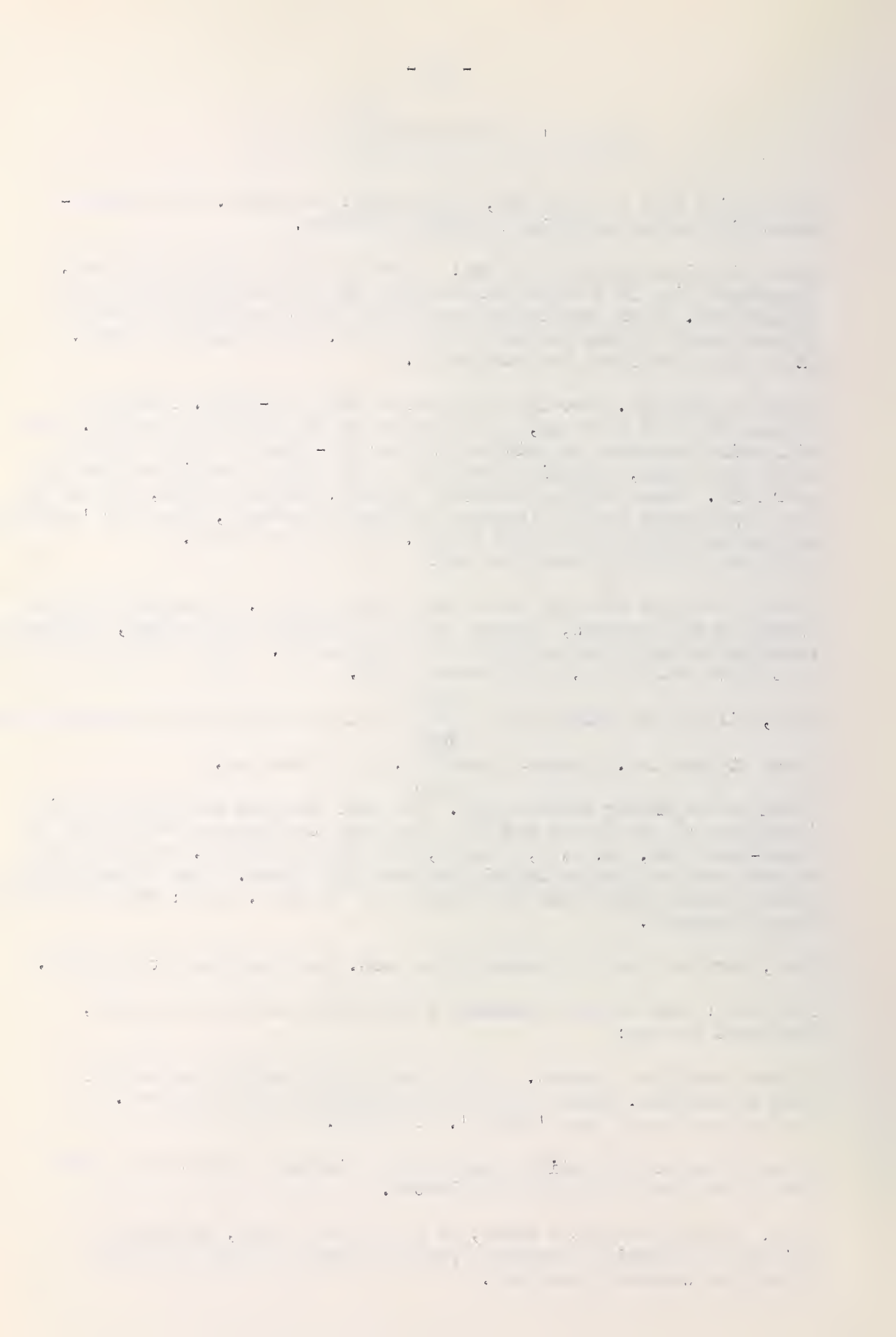
"Now, turn the page and complete the test. Work carefully but rapidly."

IMPORTANT: When there are exactly five minutes left in the period, interrupt and say:

"Please stop for a moment. If you are not yet working on the LAST PAGE in the book, please turn to that very last page right now. It is headed with the word 'MYSELF'. Do it now."

At the close of the period thank them and instruct them to turn their books face down to have them collected.

NOTE: If you know that a class, or a part of a class, has very low ability in following directions you may clarify BUT NOT ALTER the directions wherever necessary.



INTERPERSONAL ATTITUDE SCALE

Form D-S

This is a test to help the examiner understand boys and girls of your age, and some of the people who have played a part in your life. The test is completed in three steps. The directions will be read to you.

You can answer this test freely and honestly. Your test results will not be known to anyone in your school. In fact, you won't even write your name anywhere on this test.

AGE-MATES:

- 1 (an age-mate who plays or has played the most important part in your life.)
2 (an age-mate who is 2nd most important in your life)
3 (an age-mate who is 3rd most important in your life)
4 (an age-mate who is 4th most important in your life)

ADULTS:

- 1 (an adult who plays or has played the most important part in your life.)
2 (an adult who is 2nd most important in your life)
3 (an adult who is 3rd most important in your life)

YOURSELF:

BOY - GIRL Born 19
(circle which) (Month) (Date) (Year)

Copy these names or initials onto the answer sheets in the above order.

SA - Strongly Agree . "So far as I know this person, I would strongly agree that this statement describes him."
A - Agree "So far as I know this person, I would agree that this statement describes him."
U - Undecided "I am undecided whether or not this statement describes this person." (When in doubt, circle this.)
D - Disagree "So far as I know this person, I would disagree with this statement in describing him."
SD - Strongly Disagree "So far as I know this person, I would strongly disagree with this statement in describing him."

You will draw a circle around SA, A, U, D or SD, whichever will best describe the person whose name or initials are at the top of the answer sheet.

On this page you will think of
this person.

AGE-MATE

(1)

(copy from front page)

- | | | | | | |
|---|----|---|---|---|----|
| 1. This person likes to tell others what to do. . . . | SA | A | U | D | SD |
| 2. This person is a "follower" in a group. . . . | SA | A | U | D | SD |
| 3. This person takes on responsibility easily. . . . | SA | A | U | D | SD |
| 4. This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. This person gives orders. | SA | A | U | D | SD |
| 6. This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. This person competes with others. | SA | A | U | D | SD |
| 8. This person seldom talks back. | SA | A | U | D | SD |
| 9. This person is easily led. | SA | A | U | D | SD |
| 10. This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. This person is a weak or spineless person. . . . | SA | A | U | D | SD |
| 12. This person acts shy or timid with others. . . . | SA | A | U | D | SD |
| 13. This person lets others "walk all over him". . . . | SA | A | U | D | SD |
| 14. This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. This person wants to manage other people. , . . | SA | A | U | D | SD |
| 16. This person appears meek or humble. | SA | A | U | D | SD |
| 17. This person acts with self-confidence. | SA | A | U | D | SD |
| 18. This person obeys others willingly. | SA | A | U | D | SD |
| 19. This person usually gives in to others. | SA | A | U | D | SD |
| 20. This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

On this page you will think of
this person.

AGE-DATE	(2)
(copy from front page)	

- | | | | | | |
|---|----|---|---|---|----|
| 1. This person likes to tell others what to do. | SA | A | U | D | SD |
| 2. This person is a "follower" in a group. | SA | A | U | D | SD |
| 3. This person takes on responsibility easily. | SA | A | U | D | SD |
| 4. This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. This person gives orders. | SA | A | U | D | SD |
| 6. This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. This person competes with others. | SA | A | U | D | SD |
| 8. This person seldom talks back. | SA | A | U | D | SD |
| 9. This person is easily led. | SA | A | U | D | SD |
| 10. This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. This person is a weak or spineless person. | SA | A | U | D | SD |
| 12. This person acts shy or timid with others. | SA | A | U | D | SD |
| 13. This person lets others "walk all over him". | SA | A | U | D | SD |
| 14. This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. This person wants to manage other people. , | SA | A | U | D | SD |
| 16. This person appears meek or humble. | SA | A | U | D | SD |
| 17. This person acts with self-confidence. | SA | A | U | D | SD |
| 18. This person obeys others willingly. | SA | A | U | D | SD |
| 19. This person usually gives in to others. | SA | A | U | D | SD |
| 20. This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

On this page you will think of
this person.

AGE-MITE	3
(copy from front page)	

- | | | | | | | |
|-----|--|----|---|---|---|----|
| 1. | This person likes to tell others what to do. . . . | SA | A | U | D | SD |
| 2. | This person is a "follower" in a group. . . . | SA | A | U | D | SD |
| 3. | This person takes on responsibility easily. . . . | SA | A | U | D | SD |
| 4. | This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. | This person gives orders. | SA | A | U | D | SD |
| 6. | This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. | This person competes with others. | SA | A | U | D | SD |
| 8. | This person seldom talks back. | SA | A | U | D | SD |
| 9. | This person is easily led. | SA | A | U | D | SD |
| 10. | This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. | This person is a weak or spineless person. . . . | SA | A | U | D | SD |
| 12. | This person acts shy or timid with others. . . . | SA | A | U | D | SD |
| 13. | This person lets others "walk all over him". . . | SA | A | U | D | SD |
| 14. | This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. | This person wants to manage other people. , . . | SA | A | U | D | SD |
| 16. | This person appears meek or humble. | SA | A | U | D | SD |
| 17. | This person acts with self-confidence. | SA | A | U | D | SD |
| 18. | This person obeys others willingly. | SA | A | U | D | SD |
| 19. | This person usually gives in to others. | SA | A | U | D | SD |
| 20. | This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

On this page you will think of
this person.

AGE-MITE

4

(copy from front page)

- | | | | | | | |
|-----|--|----|---|---|---|----|
| 1. | This person likes to tell others what to do. . . . | SA | A | U | D | SD |
| 2. | This person is a "follower" in a group. . . . | SA | A | U | D | SD |
| 3. | This person takes on responsibility easily. . . | SA | A | U | D | SD |
| 4. | This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. | This person gives orders. | SA | A | U | D | SD |
| 6. | This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. | This person competes with others. | SA | A | U | D | SD |
| 8. | This person seldom talks back. | SA | A | U | D | SD |
| 9. | This person is easily led. | SA | A | U | D | SD |
| 10. | This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. | This person is a weak or spineless person. . . . | SA | A | U | D | SD |
| 12. | This person acts shy or timid with others. . . . | SA | A | U | D | SD |
| 13. | This person lets others "walk all over him". . . | SA | A | U | D | SD |
| 14. | This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. | This person wants to manage other people. , . . | SA | A | U | D | SD |
| 16. | This person appears meek or humble. | SA | A | U | D | SD |
| 17. | This person acts with self-confidence. | SA | A | U | D | SD |
| 18. | This person obeys others willingly. | SA | A | U | D | SD |
| 19. | This person usually gives in to others. | SA | A | U | D | SD |
| 20. | This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

On this page you will think of
this person:

ADULT (1)
(copy from front page)

- | | | | | | |
|---|----|---|---|---|----|
| 1. This person likes to tell others what to do. . . . | SA | A | U | D | SD |
| 2. This person is a "follower" in a group. | SA | A | U | D | SD |
| 3. This person takes on responsibility easily. . . . | SA | A | U | D | SD |
| 4. This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. This person gives orders. | SA | A | U | D | SD |
| 6. This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. This person competes with others. | SA | A | U | D | SD |
| 8. This person seldom talks back. | SA | A | U | D | SD |
| 9. This person is easily led. | SA | A | U | D | SD |
| 10. This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. This person is a weak or spineless person. . . . | SA | A | U | D | SD |
| 12. This person acts shy or timid with others. . . . | SA | A | U | D | SD |
| 13. This person lets others "walk all over him". . . | SA | A | U | D | SD |
| 14. This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. This person wants to manage other people. . . . | SA | A | U | D | SD |
| 16. This person appears meek or humble. | SA | A | U | D | SD |
| 17. This person acts with self-confidence. | SA | A | U | D | SD |
| 18. This person obeys others willingly. | SA | A | U | D | SD |
| 19. This person usually gives in to others. | SA | A | U | D | SD |
| 20. This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

RECEIVED

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY
WASHINGTON, D. C.
JAN 10 1911
TO THE DIRECTOR
FROM THE CHIEF OF BUREAU
SUBJECT: [illegible]
[The following text is extremely faint and largely illegible, appearing to be a series of lines or a list.]

On this page you will think of
this person:

ADULT <u>2</u> (copy from front page)
--

- | | | | | | | |
|-----|--|----|---|---|---|----|
| 1. | This person likes to tell others what to do. . . . | SA | A | U | D | SD |
| 2. | This person is a "follower" in a group. . . . | SA | A | U | D | SD |
| 3. | This person takes on responsibility easily. . . | SA | A | U | D | SD |
| 4. | This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. | This person gives orders. | SA | A | U | D | SD |
| 6. | This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. | This person competes with others. | SA | A | U | D | SD |
| 8. | This person seldom talks back. | SA | A | U | D | SD |
| 9. | This person is easily led. | SA | A | U | D | SD |
| 10. | This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. | This person is a weak or spineless person. . . . | SA | A | U | D | SD |
| 12. | This person acts shy or timid with others. . . . | SA | A | U | D | SD |
| 13. | This person lets others "walk all over him". . . | SA | A | U | D | SD |
| 14. | This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. | This person wants to manage other people. . . . | SA | A | U | D | SD |
| 16. | This person appears meek or humble. | SA | A | U | D | SD |
| 17. | This person acts with self-confidence. | SA | A | U | D | SD |
| 18. | This person obeys others willingly. | SA | A | U | D | SD |
| 19. | This person usually gives in to others. | SA | A | U | D | SD |
| 20. | This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

On this page you will think of
this person:

ADULT

3

(copy from front page)

- | | | | | | | |
|-----|--|----|---|---|---|----|
| 1. | This person likes to tell others what to do. | SA | A | U | D | SD |
| 2. | This person is a "follower" in a group. | SA | A | U | D | SD |
| 3. | This person takes on responsibility easily. | SA | A | U | D | SD |
| 4. | This person is domineering, likes to
control others. | SA | A | U | D | SD |
| 5. | This person gives orders. | SA | A | U | D | SD |
| 6. | This person belittles himself, "runs
himself down" before others. | SA | A | U | D | SD |
| 7. | This person competes with others. | SA | A | U | D | SD |
| 8. | This person seldom talks back. | SA | A | U | D | SD |
| 9. | This person is easily led. | SA | A | U | D | SD |
| 10. | This person is not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. | This person is a weak or spineless person. | SA | A | U | D | SD |
| 12. | This person acts shy or timid with others. | SA | A | U | D | SD |
| 13. | This person lets others "walk all over him". | SA | A | U | D | SD |
| 14. | This person leads in a group without
showing fear. | SA | A | U | D | SD |
| 15. | This person wants to manage other people. | SA | A | U | D | SD |
| 16. | This person appears meek or humble. | SA | A | U | D | SD |
| 17. | This person acts with self-confidence. | SA | A | U | D | SD |
| 18. | This person obeys others willingly. | SA | A | U | D | SD |
| 19. | This person usually gives in to others. | SA | A | U | D | SD |
| 20. | This person is often giving advice. | SA | A | U | D | SD |

Please continue on the next page.

On this page you will think of
yourself.

MYSELF

- | | | | | | | |
|-----|--|----|---|---|---|----|
| 1. | I like to tell others what to do. | SA | A | U | D | SD |
| 2. | I am a "follower" in a group. | SA | A | U | D | SD |
| 3. | I take on responsibility easily. | SA | A | U | D | SD |
| 4. | I am domineering, I like to
control others. | SA | A | U | D | SD |
| 5. | I give orders. | SA | A | U | D | SD |
| 6. | I belittle myself, "run myself down"
before others. | SA | A | U | D | SD |
| 7. | I compete with others. | SA | A | U | D | SD |
| 8. | I seldom talk back. | SA | A | U | D | SD |
| 9. | I am easily led. | SA | A | U | D | SD |
| 10. | I am not afraid to say "No"
to others. | SA | A | U | D | SD |
| 11. | I am a weak or spineless person. | SA | A | U | D | SD |
| 12. | I act shy or timid with others. | SA | A | U | D | SD |
| 13. | I let others "walk all over me". | SA | A | U | D | SD |
| 14. | I lead in a group without
showing fear. | SA | A | U | D | SD |
| 15. | I want to manage other people. | SA | A | U | D | SD |
| 16. | I appear meek or humble. | SA | A | U | D | SD |
| 17. | I act with self-confidence. | SA | A | U | D | SD |
| 18. | I obey others willingly. | SA | A | U | D | SD |
| 19. | I usually give in to others. | SA | A | U | D | SD |
| 20. | I am often giving advice. | SA | A | U | D | SD |

If you have time, check for statements you may have missed.

B29775